

To:	Transport & Health Policy Makers, & Practitioners
From:	Prof Adrian Davis, TRI, Edinburgh Napier University
Date:	18 <sup>th</sup> September 2020
Subject:	Essential Evidence 4 Scotland No. 29 Exploring
	changes in active travel uptake and cessation
	across the lifespan

Top Line: Young adulthood is a critical period where long-term transport behaviours are shaped and that behaviours developed in this period could be maintained into middle and older adult life.

The promotion of active travel (i.e. commuting by walking, cycling and public transport) is increasingly being recognised as a key intervention to increase population physical activity. Public transport use frequently involves walking or cycling components across the journey and is therefore considered a form of active travel. Active travel is associated with reduced rates of obesity, type 2 diabetes, hypertension, cardiovascular disease, some cancers and death from all causes.

Predictors of active travel behaviour are complex and reflect context-specific socio-demographic, social, cultural and environmental factors. These include gender, socio-economic position, employment type, cultural norms, commute distance, family structure and car access. Built environment factors such as availability and quality of walking, cycling and public transport infrastructure, and destination factors including parks and residential density also influence active travel. Little is known about how socio-demographic factors interact to affect active travel initiation and cessation across the lifespan. A recent paper suggested two thirds of older UK adults rarely use public transport, with the authors concluding the related lack of physical activity was associated with a decline in general conditioning. If active travel uptake or cessation is more likely at different life stages, then better understanding these critical periods might offer opportunities for improved targeting of interventions.

In order to explore this issue of active travel uptake and cassation across the lifespan, researchers undertook a longitudinal study of the UK Household Longitudinal Survey (UKHLS) General Population Sample (GPS) examining how uptake and cessation of active commuting changed between waves two and six of the survey (2010–2012 & 2014–2016). This involved 11,559 participants of which 6478 were females.<sup>2</sup>

Walking and cycling initiation was most common among the youngest group of males (7.9%) and females (9.3%) dropping to 2.5% and 3.6% for >55-year-old males and females respectively. The direction and magnitude of reduction was similar for both sexes. Public transport initiation was also more common among the youngest males (10.5%) and females (9.6%) dropping to 3.4% and 3.5% in >55 year-old males and females respectively. A similar direction and magnitude of change was observed in both sexes.

In this study, compared to baseline (16–34 age group), 45–55-year-olds were significantly less likely to initiate regular walking or cycling during the study period. 35–44 year-olds were significantly less likely to cease walking or cycling compared to the 16–34-year-old group, as were 45–55 year-olds and > 55-year-olds. Finally, 35–44-year-olds were significantly less likely to cease commuting by public transport compared to the baseline, as were 45–55 year-olds and >55 year-olds. Middle and older age adults are significantly less likely to take up walking and cycling compared to younger adults. Yet, middle and older age adults are also significantly less likely to cease walking, cycling and using public transport.

<sup>1</sup> P. Rouxel, E. Webb, T. Chandola, 2017. Does public transport use prevent declines in walking speed among older adults living in England? A prospective cohort study, *BMJ Open*, 7 (9).

<sup>&</sup>lt;sup>2</sup> Pistoll, C., Cummins, S. 2019. Exploring changes in active travel uptake and cessation across the lifespan Longitudinal evidence from the UK Household Longitudinal Survey, *Preventive Medicine Reports*, 13: 57-61.