

To: Transport & Health Policy Makers, & Practitioners
From: Prof Adrian Davis, TRI, Edinburgh Napier University
Date: 25th September 2023
Subject: Essential Evidence 4 Scotland No.73: The benefits of free bus travel among those aged 60+

Top line: Subsidised and free public transport schemes have the potential to reduce existing health inequalities and to promote healthy ageing. This is particularly through increases in bus use, and increases in use among those with less disposable incomes.

International evidence suggests that access to public transport is associated with increased social participation and mobility among older adults. Provision of affordable, reliable and accessible public transport is included in the WHO Checklist of Essential Features of Age-friendly Cities.¹ Evidence shows that offering zero-fare travel generally results in substantial increases in bus patronage. This includes that use of public transport varies across different groups. It also shows patterns of greater bus use by women and individuals living in urban areas, with no access to a car, and with manual occupations and therefore potentially less disposable income to access more expensive modes such as train travel or taxis.¹ Free bus pass take-up is equitable across groups, and is strongly linked to public transport use among older people.²

Increasing bus use provides multi-faceted health benefits among older people including a protective buffer to those who cease driving who can access free bus use. Free Bus Pass holders aged between 70 and 74 are the group more likely to regard the free bus pass as something that had improved their quality of life, compared with 60-65-year-olds.³ It is argued that this is because these age groups are the ones which align with being at the life-stage of ceasing driving, whilst still having relatively high trip-making aspirations. Driving cessation is increasingly common among older people with negative implications for independence, social identity, social engagement, and physical and mental health. However, bus use offers an alternative means of travel for those who no longer drive and research suggest that access to free travel increases bus pass ownership and bus travel among older people. Direct health benefits from using buses among older people include being less likely to be obese compared with those who do not.⁴

Other findings suggest that increased public transport use due to the free bus pass is associated with improved cognitive function, particularly memory scores.⁵ This evidence expands on earlier literature documenting the benefits of the free bus pass for physical activity, social engagement, mental health, and quality of life and well-being. Research has linked increased public transport use due to the free bus pass with social engagement, such as volunteering and spending time with children and friends, and with reductions in depressive symptoms and loneliness.⁶ Moreover, a free bus pass has been linked to increased likelihood of at least monthly participation in intellectually stimulating cultural activities (theatre, museums, galleries, cinema). Studies have also documented how the bus ride itself can be a social activity, by offering opportunities for social interaction and group travel. Social engagement is postulated to benefit cognitive health by increasing use of cognitive faculties in social interactions, reducing stress, and promoting mental and physical health.³

¹ Whitley, E. et al 2020 Impact of the statutory concessionary travel scheme on bus travel among older people: a natural experiment from England, *Ageing and Society*, 40: 11.

² Lavery, A. et al 2018 Take up and use of subsidised public transport: Evidence from the English Longitudinal Study of Ageing, *Journal of Transport & Health*, 8.

³ Andrews, G., et al, 2012 The grey escape: investigating older people's use of the free bus pass, *Transport Planning and Technology*, 35:1.

⁴ Webb, E. et al, 2012 Free bus passes, use of public transport and obesity among older people in England, *Journal of Epidemiology and Community Health*, 66:2.

⁵ Reinhard, E. et al, 2019 Public Transportation Use and Cognitive Function in Older Age: A Quasi-Experimental Evaluation of the Free Bus Pass Policy in the United Kingdom, *American Journal of Epidemiology*, 188:10.

⁶ Reinhard, E. et al, 2018 Public transport policy, social engagement and mental health in older age: a quasi-experimental evaluation of free bus passes in England, *Journal of Epidemiology and Community Health*, 72: 5.