

SUSTAINABLE MOBILITY THROUGH PUBLIC TRANSPORT INITIATIVES: THE CASE OF JOHOR BAHRU CONSUMERS

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Abstract

One of the key challenges of sustainable mobility is to encourage people to use public transportation either for work or leisure purposes. Public transport patronage in all cities in Malaysia is still below full capacity and much lower than the 50 per cent modal share set to be achieved by the year 2020. This paper discusses the findings from two separate surveys, a user survey and a stated preference survey, conducted on the users and non-users of public transport respectively in the city centre of Johor Bahru. The surveys involved 702 commuters who were selected using the area/cluster sampling method. Issues faced by the public transport users are highlighted and the travel mode choice behaviour of the private transport users was modelled. Findings from the user survey identified the critical factors that might influence people to shift towards using public transport, which are safety, accessibility, fare, information dissemination (communication), reliability and customer service. The stated preference survey revealed that reduction in public transport fare and improvement in service level alone are not sufficient to raise public transport ridership. There must also be the right amount of

disincentives in place to discourage people from using private cars in moving around.

Keywords: Sustainable mobility; public transport; stated preference; travel mode; choice behaviour.

Introduction

As nations become more affluent, usage of public transport loses out to the private cars. Cities and urban areas are facing greater challenge of rapid motorization and modernization. In Malaysia, the provision of easy ownership of private vehicles subsequently led to a higher proportion of the urban society switching to private vehicles instead. In turn, public transport utilization tend to decline drastically as evidenced by the modal share of public transport which dropped from 19.7% in 1985 to 16% in 2003 (BinaFikir, 2005). While private vehicles may provide the flexibility in mobility and travelling, it may not be sustainable in the long run due to its heavy consumption on petroleum as fuel and the effects on the environment such as air pollution and acidic rain. A study by the Department of Environment in 2011 showed that motor vehicles contributed more than 80% to air pollution in Malaysia.

