

railfuture

PROMOTING BRITAIN'S RAILWAY FOR PASSENGERS AND FREIGHT

www.railfuture.org.uk www.railfuturewales.org.uk www.railfuturescotland.org.uk

National Railcard Economic Research

Commissioned from The Railway Consultancy Ltd by Railfuture



An Executive Summary

- Many British people find the cost of rail travel a barrier for this mode of transport. Other European countries have tried to address this problem with railcards offering discounted travel. This report examines this alternative for the British rail industry.
- The proposed National Railcard is a card offering discounted off-peak travel throughout the whole UK network, for passengers travelling alone who are not eligible for any other railcards. As such, it is designed to fill off-peak spare capacity. Consequently, the extra revenue from this additional demand should feed straight into train operators' profits.
- This product is a two-part tariff where a fixed cost is paid for the card and a discounted price is paid for subsequent rail trips. This pricing scheme is already being widely used to maximize profits (e.g. mobile

phones and sport clubs). It can also be shown that the theoretically optimal two-part tariff will maximize passenger numbers.

- The passenger facing the decision to buy the card or not must weigh up the cost of paying for the card with the benefits of the discounts to rail travel obtained from it. Passengers must consider their expected travel frequency in order to make this decision. However, once the card is bought, the perceived cost for rail travel is the discounted fare and the cost of the card plays no role whatsoever in the decision of how much rail travel to consume. As a consequence of the discount offered, trip frequencies are expected to be enhanced for those who buy the card.
- We used survey data on personal travel profiles such as trip frequencies and average trip lengths for the whole UK. We modelled the reaction of passengers facing these decisions using two alternative assumptions about their behaviour. A naïve behaviour assumption was contrasted with a more sophisticated one. However, results for both approaches were similar.
- We split our analysis into the “London and South East” and “Elsewhere” markets. We found the latter to have greater benefits from this product. In the former market, rail trips tend to be relatively more related to commuting and, for a card priced £20, offering a discount of one third on off-peak rail travel, our model predicts only some 500,000 cards to be sold. The equally priced, currently available Network Railcard only sells 360,000 each year, but this product is less attractive: it’s geographically limited and is subject to a minimum fare.
- Under our most conservative forecasts, a card with such pricing will be bought by 2.7 million passengers each year across the UK. Passenger miles will increase by 11% and incremental profits for the industry will be in the order of £50 million. This could mean fewer subsidies paid and higher patronage. Consequently the subsidy/passenger miles ratio would fall by 5%.
- We studied the performance of the scheme over a range of plausible pricing structures. We found that profits are maximized when the card is priced at £30 and offers discounts of 50%. Under this scenario, we forecast 2.7 million cards to be sold, generating £70 million incremental profits and boosting off-peak passenger miles by 25%. Subsidy per passenger mile is minimized at this point, implying a reduction of 13% from actual levels.
- The value of the reduction in external costs from transport such as pollution and congestion was estimated at £2m. Other benefits of this scheme, albeit not quantified in this report, are social inclusion to the railways and the financial net impact for TOCs which will receive income before the service has been delivered.
- Our results show that a National Railcard can encourage more people to travel by rail off-peak, thus enhancing TOCs profits. However, they are heavily dependent on a series of assumptions, so profit figures may be overstated. Nevertheless, we believe there is indeed a positive case for a National Railcard. The importance of our preliminary results suggests it might be worthwhile to conduct further research in order to test these assumptions and to advance the detail of the scheme.

The Railway Consultancy Ltd,

1st floor South Tower, Crystal Palace Station, London. SE19 2AZ.
Tel 020-8676-0395 Fax 020-8778-7439 e-mail info@railcons.com

The full report can be found at www.railfuture.org.uk/dl65.

Produced for Railfuture – Promoting Britain’s Railway for Passengers and Freight

www.railfuture.org.uk
info@railfuture.org.uk