Written evidence from Applied Criminology Centre (ACC), University of Huddersfield (SOR0006)

1. Summary

- 1.1 This submission presents findings from a research project that evaluated two schemes designed to improve personal security and reduce crime at railway stations and railway station car parks, namely 'Secure Stations' and 'Safer Parking.' The project investigated the relationship between the presence of these schemes and changes crime levels as part of an economic-based evaluation.
- 1.2 The results indicated that the Secure Stations and Safer Parking schemes provide benefits through reductions in crime, improvements in passenger perceptions of safety, and the potential to increase rail patronage by attracting new rail users or encouraging existing users to make additional trips.

2. Initiatives to reduce crime at rail stations

- 2.1 Secure Stations is a scheme that provides recognition to station operators, through accreditation by the British Transport Police (BTP), for managing security and adopting measures to reduce crime. The scheme was launched in 1998 and by 2011 there were 1,245 accredited stations. Safer Parking operates on similar principles and is managed by the British Parking Association on behalf of the Association of Chief Police Officers (ACPO). In the rail sector, approximately 400 stations have gained accreditation for their car parks. The increase in the number of accredited stations and car parks has been driven by the inclusion, within rail franchise negotiations, of commitments by train operating companies to extend the proportion of stations covered by the schemes.
- 2.2 Although railway stations are free to adopt security measures if they so choose, those with Secure Station accreditation implemented a greater number of protective measures than non-accredited stations. Our examination of measures implemented across a sample of 322 stations provided convincing evidence that the greater number of interventions at Secure Stations contributed to the prevention of crime at those sites. At Secure Stations, where the uptake of crime prevention measures was significantly greater than at their non-accredited counterparts, there was an increased likelihood that these stations would be characterised by the presence of CCTV, automated ticket barriers and emergency help points, better coverage and quality of lighting, and a greater number of staffing hours.
- 2.3. The differences between Safer Parking and non-accredited car parks were not as marked, the main distinction being a increased likelihood that the car park would be patrolled

3. Impact of Secure Stations and Safer Parking Schemes on Crime and Patronage

- 3.1 The research found that the following measures reduced crime at railway stations and railway station car parks:
 - the presence of station/car park staff;
 - the presence of CCTV;
 - measures to improve lines of sight across the station;
 - the presence of ticket barriers, and the ability to secure station property and spaces therein;
 - the extent of routine activity associated with the presence of shops and cafes etc.

- 3.2 Secure Station accreditation is associated with lower levels of theft from a person by 24%, criminal damage by 35%, and vehicle crime by 36%.
- 3.3 In the absence of Secure Station accreditation, Safer Parking accreditation has no discernible influence upon vehicle crime, but does bring additional benefit when combined with Secure Station, giving rise to a combined effect of 48% reduction in vehicle crime.
- 3.4 Passenger awareness of station and car park accreditation was extremely low. This is not surprising given that the schemes are not widely publicised. Despite this lack of awareness, statistically significant differences were identified in passengers' feelings of safety between Secure Stations and non-accredited stations, suggesting that, to a small degree, these locations are perceived as safer environments.
- 3.5 No differences were identified between perceptions of personal safety at Safer Parking and non-accredited car parks.
- 3.6 Secure Stations/Safer Parking generate benefits to existing rail users by reducing the frequency of actual crime incidents and by contributing to improvements in perceptions of crime risk more generally. However, the research also showed that, whilst existing station/car park users place significant value upon specific personal security interventions at stations/car parks, they are reluctant to pay for them through increased fares or car park charges.
- 3.7 Secure Stations/Safer Parking generate benefits to new rail users (and/or existing users making additional trips) in the following ways:
 - Secure Stations and Safer Parking have a significant effect on rail demand (e.g. 7% for season tickets, 1% for non-season tickets).
 - This increase in demand implies the existence of benefits to 'new' users, and increased revenue to train operating companies from increased patronage.
- 3.8 It is worth noting that the demand impact reported is largely driven by the Secure Station scheme. The specific contribution of Safer Parking was difficult to discern statistically.

4. Recommendations

- 4.1 The research findings strongly supported the continuation and expansion of the Secure Stations/Safer Parking schemes.
- 4.2 There is a good case for formalising the evaluation of Secure Stations/Safer Parking interventions in line with the evaluation of other comparative interventions such as station/service quality and railway safety improvements.
- 4.3 There is a good case for the incorporation of the findings from this research into the Passenger Demand Forecasting Handbook (PDFH).

5. Deliverables

5.1 In addition to the final report and research brief, the study has developed a Planning Tool, which features the following key elements:

- It records background data for a user-defined personal security intervention (Secure Stations, Safer Parking, specific physical interventions, or some combination thereof) at a railway station/railway station car park.
- It incorporates a crime model, to provide a first estimate of the crime reduction impact of the intervention.
- It estimates the rail demand impact, based on a patronage model.
- It values the social benefits of the intervention.
- It aggregates the benefits and costs to a Net Present Value (NPV) and Benefit: Cost Ratio (BCR) using methods and parameters consistent with industry and DfT practice.
- It conducts sensitivity analysis for key parameters.

6. A note on methods

6.1 For a representative sample of 322 stations (and station car parks, where applicable) for period 2006/7 to 2011/12, the study analysed British Transport Police recorded crime data and compared this to a database of crime prevention measures obtained through an online survey of station/car park operators. The analysis identified relationships between the incidence of crime by crime type and the presence or absence of security measures. The analysis concentrated on crimes occurring in stations and their car parks and not on line of route crimes.

6.2 For the same sample and time period, an analysis of station patronage data and socio-economic-demographic data identified relationships between the incidence of crime by crime type and rail patronage, defined in terms of sales of rail tickets.

6.3 For a selective sample of seven stations and four station car parks, the study conducted willingness-to-pay (WTP) passenger surveys based on some 1140 individuals, to value reductions in crime risk that might be associated with Secure Stations/Safer Parking.

6.4 The study was conducted by the Institute for Transport Studies (ITS), University of Leeds and The Applied Criminology Centre (ACC), University of Huddersfield. The research was funded by the Rail Safety and Standards Board (RSSB).

6.5 The full report and a briefing note can be obtained by visiting: http://www.rssb.co.uk/RESEARCH/Lists/DispForm Custom.aspx?ID=1010

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