

V2 Reducing Anti-social Behaviours which Cause Trespass

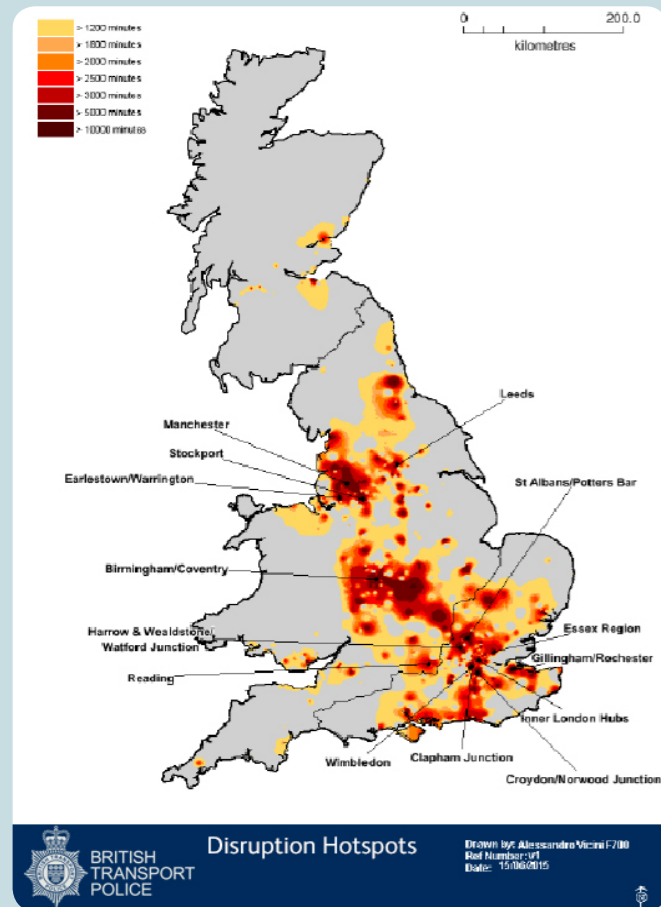
What is the situation? Trespass on the rail network is a key generator of both primary and reactionary lost minutes which negatively impacts upon railway operations. In 2015/2016, the total performance delay costs associated with trespass and vandalism amounted to £24.9m.

What is the challenge?

Reducing anti-social behaviour which affects railway operations and causes delayed minutes and associated costs.

Detailed disruption data indicates that:

- Trespass disruption is increasing year on year (17.0% between 13/14 and 14/15)
- Trespass disruption accounts for 42.4% of the total lost minutes for all disruption categories



Example trespass hotspot locations only. Data from June 2015.

Why is it a challenge?

There are various factors which contribute to trespass disruption (detailed in Analysis of Causes section) and current efforts to address the key issues are not minimising the disruption. In many hotspot areas (see map), lost minutes are increasing and it is therefore assumed that the causal issues are getting worse. The challenge is to address the causes of disruption, minimising the effects on railway operations and also improve our data techniques, technology support and analysis to support better information systems.

Incident reason code	Title	Disruption per year (av 2011 - 2016)
VA	Disorder/drunks or trespass	144,176 lost mins
VB	Vandalism or theft	274,435 lost mins
XR	Cable vandalism or theft	132,190 mins
XB	Vandalism or theft (including the placing of objects on the line)	110,491 mins
VC	Fatalities and or injuries sustained on platform result of struck by train or falling from a train	23,140 lost mins
XA	Trespass	380,861 lost mins
XC	Fatalities or injuries caused by being hit by train	426,427 lost mins
XD	Level Crossing Incidents including misuse	61,378 lost mins

Priority problems

Specific priority problems

- Rail passengers are committing trespass to evade ticket blockades.
- Groups of youths are committing trespass offences in the spring/summer at high impact disruption locations in line with Bank and school holidays.
- Trespass-related disruption events include suicidal trespassers or failed suicide attempts.
- Alcohol and travel fraud are significant contributing factors towards railway disruption.
- Identifying the exact location and details of a trespass can be problematic. Clear location and causal data is often hard to ascertain due to quality and delays in submitting reports.

Related goals

- Saving lives and maintaining the wellbeing of social systems which are disrupted when lives are lost.
- Improving the safety of railway operations.
- Addressing causal issues of anti-social behaviour which have wider negative social effects than the efficient running of the railway system.
- Improvement in reporting allows for better data analysis and improvement in identifications of related crime trends.

Benefits

- Cost savings to the taxpayer via minimising delay compensation costs.
- Performance benefits due to reduced trespass delay minutes.
- Improved passenger satisfaction.
- Safety and wellbeing benefit for public, passenger and railway workers.
- Improved social stability due to reduction in anti-social behaviour.
- Improving Network Rail's reputation as a responsible and caring business.

Specific research needs

To address these challenges, and gain the associated benefits, it is expected that R&D actions will need to address the following aspects:

- Existing or newly developed technologies (e.g. trembler alarms and motion-activated cameras) could be utilised to target specific hot spot trespass locations.
- Improvements in collaborative datasets (particularly between NR, BTP and TOCs/FOCs) with detailed information on trespass events and disruptions, would allow effective analysis, and collaborative solutions to be found for key hotspot areas and corresponding social issues.
- Developing solutions to address underlying social issues which cause anti-social behaviour around the railway.
- Developing technology solutions which effectively prevent anti-social behaviour or its effects.

There is an important need to not only tailor solutions to problems at a local level but for those solutions to be future proofed and sustainable.



fig. 1 Level crossing misuse.



fig. 2 Graffiti.



fig. 3 Drugs and alcohol issues.



fig. 4 Suicide intervention.

Analysis of causes

