

Cars & Crime 2026 Symposium

DAY 1 – Thursday 30th July

- 9.00** **Tea and coffee** (Craiglands Hotel)
- 9.30** **Introduction** (Craiglands Hotel)
- 9.45** **Session 1** (Craiglands Hotel, chaired by Ian)
Sally Kyd - *Reframing road traffic offences: Driving as a prima facie unlawful act*
Nicholas Goldrosen - *Sentencing motonormatively*
- 10.45** **Coffee** (Craiglands Hotel)
- 11.00** **Session 2** (Craiglands Hotel / Ilkley Moor, chaired by Caroline)
Juan Fonseca Zamora – *Predicting traffic offence hotspots: A network-based approach to identifying congestion-induced violations in residential areas*
Caroline Tait - *The violence toll of sprawls: A registered report using STATS19 recorded collisions against vulnerable road users*
- 12.00** **STATS19 demo** (Craiglands Hotel)
Roger Beecham & Robin Lovelace
- 13.00** **Lunch** (Craiglands Hotel)
- 14.00** **Session 3** (Craiglands Hotel / Ilkley Moor, chaired by Charles)
Hilman Prakoso – *Jalan: A participatory digital tool for community-led walking audits*
Emily Brannen - *Educating the motonormative offender: A conceptual problem for the criminology of motoring*
- 15.00** **Tea** (Craiglands Hotel / Ilkley Moor)
- 15.15** **Session 4** (Craiglands Hotel / Ilkley Moor, chaired by Matt)
Victoria Lebrech - *Serious injury collision investigation in London: Challenging to reform, despite Vision Zero*
Ruth Halkon - *Policing and digital citizen evidence: Unlocking the potential for public participation*
- 16.15** **Discussion** (Craiglands Hotel / Ilkley Moor)
The Road Violence Manifesto
- 16.45** **Walk** (Ilkley Moor)
- 19.00** **Drinks and dinner** (Cow & Calf Pub)

DAY 2 – Friday 31st July

- 9.15 Session 5** (Craiglands Hotel, chaired by Reka)
Laura Vozmediano - *Perceptions of safety and sustainable mobility choices: Lessons learned and research plans in the Basque Country*
Alex Trinidad - *Does the fear-victimisation paradox apply to the context of road violence?*
- 10.15 Session 6** (Craiglands Hotel / Ilkley Moors, chaired by Roger)
Reka Solymosi - *Conjunctive analysis of case configurations for STATS19*
Amy Aeron-Thomas - *How the justice system can help promote active travel*
- 11.15 Coffee** (Craiglands Hotel)
- 11.30 Session 7** (Craiglands Hotel / Ilkley Moors, Chaired by Amy)
Henry Yeomans - *Should England and Wales lower its legal blood alcohol content limit for driving?*
Charles Lanfear - *Testing the effect of motor traffic on fear of crime*
Jamie Wilkinson - *Vision Zero Safer Driving Sessions*
- 13.00 Lunch** (Craiglands Hotel)
- 13.45 Session 8** (Craiglands Hotel / Ilkley Moors, chaired by Henry)
Jose Pina-Sánchez - *In defence of walkability as a crime prevention strategy*
Ian Loader - *Securing car-centric cities: An ecological reconstruction of 'Designing out crime'*
- 14.45 Future plans and close** (Craiglands Hotel)
- 15.30 Drinks** (Flying Duck / Bar T'at)

Participants

Amy Aeron-Thomas (Action Vision Zero)
Matt Ashby (University College London)
Roger Beecham (University of Leeds)
Dan Birks (University of Leeds)
Emily Brannen (Keele University)
Juan Fonseca Zamora (University of Leeds)
Nicholas Goldrosen (Pennsylvania State University)
Ruth Halkon (The Police Foundation)
Peter King (University of Leeds)
Sally Kyd (University of Leicester)
Charles Lanfear (University of Cambridge)
Sam Langton (University of Manchester)
Victoria Lebrech (Action Vision Zero)
Ian Loader (University of Oxford)
Robin Lovelace (University of Leeds)
Jose Pina-Sánchez (University of Leeds)
Hilman Prakoso (University of Leeds)
Andrew Smith (University of Leeds)
Reka Solymosi (University of Manchester)
Caroline Tait (University of Leeds)
Alexander Trinidad (University of Cologne)
Laura Vozmediano (University of the Basque Country)
Jamie Wilkinson (West Yorkshire Police)
Henry Yeomans (University of Leeds)

List of abstracts

Reframing road traffic offences:

Driving as a *prima facie* unlawful act

Sally Kyd (University of Leicester)

My paper will explore how the criminal law, in regulating the use of motor vehicles, has been shaped by societal views dominated by motonormativity. One consequence of this is that driving is often assumed to be lawful, unless proved that an identifiable statutory offence has been breached.

Although not necessarily obvious to those unfamiliar with criminal law theory, driving offences such as dangerous driving (and causing serious injury or death thereby) share much in common with sexual offences such as rape. They are both “conduct crimes” rather than “result crimes”. Conviction in such cases relies on the jury (or magistrates) being persuaded that the defendant has departed sufficiently from what can be expected of him in the circumstances so that he should be convicted of a serious criminal offence. In the case of rape, the defendant must depart from an expected standard of behaviour through proof of lack of reasonable belief in consent. In the case of dangerous driving offences, the defendant must have fallen far below the standard of a competent and careful driver. Both are thus crimes of negligence. Jonathan Herring and Sorchia McCormack have argued for a rethinking of rape, starting from the proposition that a sexual penetration is a *prima facie* legal wrong which requires justification.

I will argue that we similarly ought to view driving a motor vehicle as a *prima facie* legal wrong. I do not go so far as to argue that the act of driving requires *justification*. Rather, my simple proposal is that in framing driving as a *prima facie* unlawful act, we can begin to try to undo some of the damage caused by motonormativity. Driving should only be deemed lawful *if* the driver complies with obligations imposed on them by regulatory offences. Driving is lawful if the driver has appropriate documentation (valid licence; insurance), is fit to drive (not impaired by drink or drugs, whether prescribed or unlawful), has their attention on their driving (and not allowing themselves to be distracted by, for example, their phone), the vehicle is in a roadworthy condition, and the driver is abiding by the speed limit and other rules indicated by road markings and signage.

By legally reframing the act of driving in this way, the ambition of normative compliance with road traffic offences might more easily be achieved. We can also begin to think about what changes are needed to the definition of such offences and their enforcement.

Sentencing motonormatively

Nicholas Goldrosen (Pennsylvania State University)

The centrality of cars to everyday life—especially in rural and suburban areas—means that road-related risks and harms are often perceived as less severe. I consider this motonormativity in the sentencing context, with the hypothesis that judges might sentence defendants for motor vehicle offences differently by virtue of decreased blameworthiness (motor vehicle harms seen as less weighty) and decreased need for incapacitation (less perceived risk of future harm). Using Pennsylvania (USA) sentencing data, I show that homicides caused by motor vehicles are punished more harshly than other similar homicides, but only in cases involving driving under the influence of alcohol (DUI); non-alcohol-related homicides are punished more leniently. Increased car dependence in the local area is associated with shorter sentence lengths for vehicular homicides. Non-homicide DUI offences (which have a strict mandatory minimum structure) do not display this local variation. I argue that the bifurcation in sentencing outcomes reflects the social view of driving whilst intoxicated as a particularly serious offence, whilst simultaneously downplaying the harms that result from “normative” driving. Similarly, the analysis of DUI sentences shows that sentencing legislation is a potential mechanism to reduce the impact of car dependence on sentencing variation for motoring offences.

Predicting traffic offence hotspots:

A network-based approach to identifying congestion-induced violations in residential areas

Juan Fonseca Zamora (University of Leeds)

Traffic offences in urban environments are often symptoms of broader systemic issues, such as severe congestion on major arterial roads. As main corridors become congested, drivers frequently seek alternative routes through residential areas, a practice known as rat-running, leading to reduced road safety, and negative impacts on local communities. Authorities aiming to curb these offences are often constrained by limited data and the sheer scale of the network, making it difficult to allocate enforcement and traffic management resources effectively. We propose a predictive screening methodology that uses network analysis and open data to identify residential streets most susceptible to congestion-induced traffic offences. Applying the method to Bogotá, Colombia, we integrated OpenStreetMap road network data, observed speeds on major roads, and georeferenced traffic offence reports. By calculating changes in betweenness centrality (ΔBC) on a travel-time-weighted network graph under varying congestion levels, we quantified each link's susceptibility to receiving redistributed traffic. Using a two-level cross-classified multilevel logistic model, we incorporated traffic offence reports as an empirical proxy for the presence of cut-through traffic. Our results demonstrate that increased ΔBC on residential streets is positively and significantly associated with a higher probability of traffic violation reports. Furthermore, this relationship varies significantly across city sectors, highlighting the complex interplay between local network structure, driver behaviour, and traffic enforcement intensity. This methodology provides a proactive, data-driven tool for authorities to anticipate where traffic offences are most likely to occur independently of historical incident data, enabling more targeted enforcement and strategic traffic management interventions.

The road violence toll of urban sprawl:

A registered report of collisions with cyclists and pedestrians across England

Jose Pina-Sánchez, Caroline Tait, Roger Beecham & Juan Fonseca Zamora (University of Leeds)

The risk of road collision for cyclists and pedestrians is higher in sprawls than in city centres. As a result of commuting, we also suspect that the higher risk of collision caused by residents from car-dependent sprawls is not confined to their own areas but disproportionately imposed on city dwellers. However, due to the absence of direct comparisons we do not know the specific road violence imposed by urban sprawls. This registered report will combine collision data from the Department for Transport and the Urban Grammar Spatial Signatures dataset that characterises geography by form and function to estimate the share of road violence induced by sprawls' residents within and outside their localities, and relative to levels of road violence generated by city dwellers in England and Wales. Furthermore, using the subset of collisions data including contributory factors, we will provide a lower bound estimate regarding the share of collisions that could be classified as motoring offences. Drawing on these findings we will reassess the widely held beliefs of: i) sprawls as safer than city centres; ii) residents from urban sprawls are more law-abiding than city dwellers; and iii) crime prevention strategies that promote car-dependent developments as effective.

STATS19 demo

Roger Beecham & Robin Lovelace (University of Leeds)

Jalan: A participatory digital tool for community-led walking audits

Hilman Prakoso (University of Leeds)

Jalan is a participatory approach that combines community walking audits with digital engagement to support more inclusive active travel planning. Built around the principles of Walk, Talk, and Design, the approach encourages participants to explore their neighbourhoods, reflect on their lived experiences, and contribute directly to conversations about walkability, accessibility, and safety. To support this process, the Jalan Audit App was developed as a web-based platform that enables participants to anonymously document their mobility experiences with accurate location data. Users can identify physical barriers, describe their perceptions of safety and comfort, and report issues affecting their everyday journeys. By

combining place-based engagement with community-generated spatial data, Jalan demonstrates how digital tools can strengthen participatory planning, broaden representation in transport decision-making, and ensure that lived experiences, particularly those of underrepresented communities, are better reflected in the design of safer, more accessible, and more inclusive public spaces.

Educating the motonormative offender: A conceptual problem for the criminology of motoring

Emily Brannen (Keele University)

A substantial proportion of detected motoring offending in England and Wales is now diverted from prosecution into educational disposals rather than processed through conventional sanction. This represents a distinctive institutional response: not punishment in the classical sense, not deterrence in the rational-choice tradition, not rehabilitation in the offender-reform tradition, but something hybrid, sitting uneasily across multiple criminological frameworks. The motoring context makes this hybridity particularly interesting, because it intersects with what Walker, Tapp and Davis (2023) have characterised as motonormativity - the cultural condition in which motoring harms and motoring offending are systematically minimised relative to other domains of risk and rule-breaking.

This paper sets out a conceptual problem rather than offering findings: what does it mean, criminologically, to respond to an offence with education when both the offender and the wider culture are inclined to view that offence as not really an offence? The paper argues that the criminological frameworks typically applied to diversionary disposals (deterrence, procedural justice, and restorative justice traditions among them) were developed against an implicit assumption of substantive moral consensus on the wrongness of the underlying offence. Where that consensus is largely absent and the offence sits in the zone of 'everyone does it', 'no one was hurt', 'I'm a safe driver', the mechanisms these frameworks identify may operate differently, or fail to operate at all.

The paper closes by sketching some of the conceptual questions a criminology of educational disposals in motonormative contexts would need to address whether education can communicate condemnation; whether the procedural quality of an intervention can carry normative weight when the substantive consequence is minimal; and whether the system's response to widespread minor offending shapes, rather than only responds to, the normative status of those offences. These questions are offered as an invitation to discussion rather than a set of answers.

Serious injury collision investigation in London: Challenging to reform, despite Vision Zero

Amy Aeron-Thomas & Victoria Lebrec (Action Vision Zero)

Nearly 4,000 people are reported to suffer serious injuries on London's roads every year. Of those, around 1,000 will have 'very serious' or 'moderately serious' injuries e.g. multiple wounds, amputation, several fractures. The vast majority of these collisions will be investigated at-scene by a borough officer who, up to 2024, had received only 22 minutes of training on driving offences, 20 minutes on vehicle offences, and 20 minutes on drink/drug driving as part of basic training for new officers. In most instances, the borough officer will then pass the case on to police staff at Marlowe House who have limited investigation powers.

Better collision investigations are key to (1) reducing road harm through better understanding the causes of collisions; (2) detecting and sanctioning criminal driving behaviour; and (3) securing financial compensation for injured people. Action Vision Zero has since 2021 been working to improve how these collisions are investigated, and our presentation will reflect on the challenges and wins in a city whose police force has adopted Vision Zero. Whilst 2024 saw the London Assembly's Police and Crime Committee launch an inquiry into serious injury collision investigations, change has been slow.

Policing and digital citizen evidence: Unlocking the potential for public participation

Ruth Halkon (The Police Foundation)

Digital citizen evidence – including footage from cyclists, pedestrians, horse riders, and drivers – is transforming how harm on the roads is detected and addressed. Drawing on a literature review, expert interviews, focus groups, a nationally representative public survey and new data from 22 UK police forces, this paper argues digital citizen evidence offers a vital and largely untapped resource for improving safety across all modes of travel. Such footage captures near misses, intimidation and everyday endangerment that seldom appear in official statistics, giving visibility to risks disproportionately experienced by vulnerable road users. When designed and governed ethically, digital reporting can free officer time, support targeted prevention, and strengthen trust by enabling the public to actively contribute to safer streets.

However, the rapid growth of submitted footage raises concerns about privacy, data governance and procedural justice. Forces report annual submissions ranging from hundreds to nearly 23,000, with sharp variation in processing capacity, automation and feedback. Inconsistent systems, limited communication and unclear victim or witness status can undermine confidence, entrench inequalities, shift evidential burdens onto the public and blur boundaries between state and civilian surveillance.

We propose a national framework grounded in privacy by design, with consistent portals, ethical triage, proportionate action thresholds and trauma informed communication. Used responsibly, digital citizen evidence can democratise road policing, improve protection for vulnerable road users, and help foster a fairer, more accountable approach to managing road danger.

Perceptions of safety and sustainable mobility choices: Lessons learned and research plans in the Basque Country

Laura Vozmediano (University of the Basque Country), Alexander Trinidad (University of Cologne) & Jone Aliri (University of the Basque Country)

Fear of crime and perceived safety are recognized factors shaping urban mobility, yet their role varies significantly across contexts. This presentation draws on two empirical studies conducted in the Basque Country to synthesize key findings and outline a future research agenda. The first study compared safety perceptions and active transportation decisions across two neighborhoods of contrasting socioeconomic levels in a mid-sized Spanish city (n=226). Residents in disadvantaged environments reported higher perceived unsafety and assigned greater weight to crime- and traffic-related safety when deciding to walk or cycle. A pattern of "endo-avoidance" -avoiding places within one's own neighborhood was identified in more vulnerable contexts. The second study analyzed parental predictors of children's active school commuting in Donostia-San Sebastián (n=819). In this low-crime city, altruistic fear of crime was not a significant predictor. Instead, perceived route safety and quality — encompassing traffic safety, maintenance, and route pleasantness — dominated all other predictors. Parental active mobility habits emerged as the third strongest predictor, suggesting intergenerational transmission of sustainable travel behavior. Together, these findings raise questions about the contextual boundaries of safety perception effects on mobility — including when and how fear matters — that will be discussed alongside methodological priorities for future research in this region.

Does the fear-victimisation paradox apply to the context of road violence?

Jose Pina-Sánchez (University of Leeds), Alex Trinidad (University of Cologne) & Ian Loader (University of Oxford)

This registered report investigates whether involvement in road traffic collisions meaningfully shapes pedestrians' and cyclists' perceptions of safety. Drawing on criminological insights - particularly the fear-victimisation paradox - we test whether previous literature showing no association between involvement in collisions and perceptions of road safety among cyclists could be explained by confounding bias. Using ESRA2 survey data from 24 European countries, the analysis aims to approximate average treatment effects of collision experience on perceived safety, accounting for vulnerability (age, gender) and

exposure (active travel frequency). The study employs equivalence testing to assess whether any difference in victims' perceptions is substantively meaningful. If our hypotheses are corroborated, this study will: i) clarify a current paradox from the road violence and active travel literature; ii) demonstrate shared mechanisms in perceptions of safety across different contexts; and iii) open the possibility of designing more effective road safety and active travel strategies by drawing lessons from the fear of crime literature and crime prevention strategies seeking to improve perceptions of safety.

Conjunctive analysis of case configurations for STATS19

Reka Solymosi (University of Manchester)

Testing the effect of motor traffic on fear of crime

Charles Lanfear (University of Cambridge) & Jose Pina-Sánchez (University of Leeds)

Recent studies provide growing evidence of a causal relationship between motor traffic and street crime. An outstanding question is whether pedestrians perceive this connection and if this differs for parked versus moving vehicles. We posit that pedestrians may perceive parked vehicles as limiting their ability to scan their surroundings and passing drivers as unlikely to intervene to stop a crime. These perceptions may impact willingness to use public space, with consequences for guardianship and crime reporting. Accordingly, our study examines whether pedestrians interpret the presence of automobiles as a risk signal.

This project uses state-of-the-art virtual reality (VR) facilities at the University of Leeds (HIKER) to conduct the first randomised controlled trial on this topic. We employ a two-treatment factorial design to examine how pedestrians' perceptions of safety are affected by parked cars on both sides of the street and moving traffic. We hypothesise that both reduce perceived safety. By combining VR and photo-based vignette experiments, the study assesses whether findings are robust across experimental modalities. The results will inform the effectiveness of traffic calming measures, such as low-traffic neighbourhoods, as strategies to reduce crime and fear of crime, and may contribute to future updates of Secured by Design guidance.

Should England and Wales lower its legal blood alcohol content limit for driving?

Henry Yeomans (University of Leeds)

The UK Government is consulting on a proposal to lower the legal blood alcohol content (BAC) limit for driving in England and Wales from 80mg of alcohol per 100ml of blood to 50mg of alcohol per 100ml of blood. The current limit is unchanged since 1967 and is the highest in Europe. Its proposed reduction aligns well with a body of international literature that, in general, shows that lowering the BAC limit is associated with improvements in road safety. However, much of this literature is based on findings from evaluations of laws introduced in 1970s, 1980s or 1990s. Evaluations of more recent reforms, including in Scotland and Utah, found that lowering the BAC limit for driving from 80 to 50mg per 100ml of blood had no positive impact on road safety. Two possible explanations of these outcomes have been put forward. The first is that lowering the BAC limit only has a positive effect on road safety when accompanied by wider measures, such as enhanced law enforcement or public education campaigns. The second possible explanation is that lowering the BAC limit does not have a positive effect on drink-driving when implemented in contexts where the prevalence of drink-driving is already low. Both explanations raise questions about the effectiveness of the proposed reform to drink-driving laws in England and Wales, where drink-driving levels are comparatively and historically low.

How the justice system can help promote active travel

Amy Aeron-Thomas (Action Vision Zero)

Active travel is being promoted by government for multiple reasons. Most focus on the role of the transport system and road environment.

This presentation argues there is much the justice system can do to reduce the risk posed to active road users. Starting with enforcement, this means prioritising different offences, lower speed roads and wider detection methods than possible with roads policing officers and fixed cameras. Re sanctions, key issues include the presence of vulnerable road users, out of court sanctions, repeat and extreme offenders, rehabilitation, disqualification and deterrence.

And with cyclists over 300 times more likely to be seriously injured in a crash with a car than any of the car's occupants, the post crash response is also critical, especially collision investigation. What evidence is there that these are thorough and able to identify criminal culpability and civil liability fairly? The few prosecutions that result suggest otherwise. The importance of civil compensation, often missing from justice discussions, will be highlighted. Data will come from the MoJ Criminal Justice Statistics and the Home Office Motoring Offence statistics.

Vision Zero Safer Driving Sessions

Jamie Wilkinson (West Yorkshire Police)

This session takes a practical look at what Vision Zero means in everyday terms for the people of Bradford, West Yorkshire, focusing on the shared goal of reducing serious injuries and deaths on the roads. Using real examples from West Yorkshire, it highlights common risks, patterns in local road collisions, and the issues that affect different types of road users. The session also explores how a combination of better road design, enforcement, education, and individual choices can help make a difference. By bringing together data, discussion, and real-life context, it encourages a broader understanding of road safety and the part everyone plays in making journeys safer.

In defence of walkability as a crime prevention strategy

Jose Pina-Sánchez (University of Leeds) & Ian Loader (University of Oxford)

New Urbanist ideas promoting walkability have many purported economic, social, public health and environmental benefits. But they have been criticised by proponents of Crime Prevention through Environmental Design (CPTED), who have blamed street connectivity for facilitating target recognition; providing offenders with access and escape routes, and weakening informal surveillance by making it harder to distinguish locals from non-locals. This view has been corroborated by more recent body of evidence that has consistently found a positive association between different indexes of walkability and street crime. In this paper, we challenge the consensus portraying walkable neighbourhoods as criminogenic by highlighting two key issues – one methodological, the other substantive - that have been overlooked by CPTED and environmental criminology more broadly. First, the focus on crime counts which confounds crime risk with the number of human interactions in the physical world. Second, the recurring neglect of how walkable neighbourhoods reduce crime beyond their borders, something that becomes clear once motoring offences – the most common form of street crime – are brought within the analytic frame. Once we do this, we argue, it becomes clear that - by indirectly promoting car dependency – crime prevention programmes such as *Secured by Design* inadvertently promote criminal harm. Finally, we explore the points of intersection between CPTED and walkability. Neighbourhoods can be made simultaneously more vibrant, sustainable and safe by reducing road - not street – connectivity, as proposed by urban regeneration strategies such as low traffic neighbourhoods.

Securing car-centric cities:

An ecological reconstruction of '*Designing out crime*'

Ian Loader (University of Oxford) & Jose Pina-Sánchez (University of Leeds)

What can we learn about urban crime and disorder by 'following' the car? In this paper, we address this question via an ecological critique and reconstruction of the 'crime prevention through environmental design' (CPTED) movement. We first describe the ways in which CPTED has since the mid-20th century overlooked the impact of automobility on urban life and danger, seeking instead to 'design out crime' in ways focused on crime against vehicles at the expense of car-generated crime and disorder. CPTED has,

we suggest, been an agent in the formation and securing of car-centric cities. We then seek to critically reconfigure the aspiration to ‘design’ out crime in ways that encompass the mundane harms of auto-centric mobility systems, and attend to the active role that socio-material infrastructures can play in fashioning both safe and liveable urban environments.