

Safer parks by design: Utilising open data to enhance safety for women and girls

The Safer Parks Dashboard enables police and partners to visualise safety issues, prioritise improvements and embed gender-sensitive approaches in crime prevention and reassurance.

Key details

Lead institution	The Yorkshire Policing Academic Centre of Excellence (TYP-ACE)
Principal researcher(s)	Dr Anna Barker, Dr Francesca Pontin, Dr Vikki Houlden, Dr Maeve Quinlan and Dr Melissa Barrientos a.c.h.barker@leeds.ac.uk
Police region	Yorkshire
Collaboration and partnership	<ul style="list-style-type: none">• University of Leeds• Mayor of West Yorkshire• West Yorkshire Combined Authority• West Yorkshire Violence Reduction Partnership• West Yorkshire Police• Leeds City Council• Calderdale Council• City of Bradford Metropolitan District Council• Kirklees Council• Wakefield Council• Police Crime Prevention Initiatives• Keep Britain Tidy/Green Flag Award• ESRC Vulnerability & Policing Futures Research Centre
Level of research	Professional/work based

Key details

Project start date	November 2025
Date due for completion	October 2026

Research context

Violence against women and girls (VAWG) and the fear it generates restricts women's freedom in public spaces. It limits mobility, wellbeing and participation in society. Parks are among the environments where safety concerns create the greatest barriers to access.

In Britain, one in six women feel unsafe in parks during the day, rising to four in five after dark (ONS, 2022). Harassment, poor visibility, exclusionary design and wider inequalities compel women and girls into habitual 'safety work' (Vera-Gray and Kelly, 2020), constraining independence and excluding them from the full benefits of public life.

National VAWG strategies and the Safer Streets Mission recognise the need for safer public spaces, yet there is no scalable, data-driven way to evaluate park safety from women's perspectives. Current approaches rely on generalised crime statistics or resource-intensive audits, lacking spatial granularity and intersectional insight. This project addresses this gap by co-creating an interactive Safer Parks Dashboard that integrates women's qualitative insights with open spatial data (lighting, sightlines, layout, access points, facilities, CCTV and crime rates) and gender-sensitive spatial syntax measures.

Building on a West Yorkshire study and a Bradford pilot that demonstrated feasibility, the project will refine the methodology and extend the Dashboard across West Yorkshire before scaling nationally. The tool will enable councils, designing out crime officers (DOCOs), and community partners to visualise safety-related features, identify risks and prioritise improvements. Tailored outputs will support structural changes, maintenance and community engagement, ensuring evidence can be acted upon across scales.

Aims

- Increase women's and girls' use of parks.
- Improve feelings of safety and confidence in public spaces.
- Support prevention of VAWG through evidence-based design, policing and policy.
- Deliver a scalable, open-source tool embedding women's experiences into urban design and crime prevention, enabling police and partners to create safer, more inclusive public spaces.

Research methodology

This project combines open spatial data, gender-sensitive spatial analysis and co-production with stakeholders to create an innovative, practical Safer Parks Dashboard.

Spatial metrics

We will integrate multiple data sources:

- open spatial datasets on lighting, path networks, CCTV, entrances/exits, vegetation density and crime incidents
- volunteered geographic information (OpenStreetMap) to supplement local authority data and extend coverage to rural areas
- policing and crime data, subject to ethical approval and data-sharing agreements
- intersectional insights from the ESRC GreenAWARE project

A key innovation is gender-sensitive spatial syntax measures, developed in the Bradford pilot, such as sightline calculations from women's eye height, visibility of exits and safe points and enclosure/exposure metrics. These translate qualitative insights into reproducible indicators of perceived safety.

Dashboard development

The Dashboard will be an open-access, interactive web application with tailored views for local authorities, police, community groups and the public. It will visualise safety-related features, highlight quick-win improvements and suggest priorities for investment. Supporting resources guides, videos, and documentation will ensure accessibility for both technical and non-technical users.

Co-production and testing

Iterative testing with policy and practice partners and focus groups will validate outputs, assess usability and ensure relevance. Stakeholders include local authority officers, DOCOs, crime prevention officers and community organisations. Feedback will refine spatial metrics, dashboard functionality and user guidance, ensuring practical utility and actionable recommendations.

This integrated approach will deliver a scalable, evidence-based tool that embeds women's experiences into park design, policing and community safety strategies.

Research participation

From April 2026, the project team will be scaling the Safer Parks Dashboard across England and Wales, including via an onboarding process. If local authorities or police forces wish to be involved they can contact Dr Anna Barker a.c.h.barker@leeds.ac.uk

References

- Barker A and others. (2022). ['What makes a park feel safe or unsafe?'](#) Leeds: University of Leeds.
- Safer Parks Consortium. (2023). ['Safer parks: Improving access for women and girls'](#). Leeds: University of Leeds.

Additional resources

[Project website](#)