



Environment Institute
of Australia and
New Zealand



ANET 2026

BREAKING THE BARRIERS

INNOVATING TO IMPROVE ECOLOGICAL OUTCOMES
ON TRANSPORT AND OTHER LINEAR INFRASTRUCTURE

23 – 25 MARCH 2026 | BRISBANE

IMAGE CREDIT: ROB APPLEBY, WILDSPY/GRIFFITH UNIVERSITY



JULIE RAVALLION
Senior Specialist,
Environment
and Sustainability Branch,
Transport for NSW

ABSTRACT

AI-Assisted Roadside Signage Trial to Reduce Wildlife Vehicle Collisions on the Monaro Highway, NSW

Transport for NSW is developing and trialling new AI-assisted roadside signage on the Monaro Highway north of Bredbo, New South Wales—one of the state’s identified hotspots for wildlife-vehicle collisions, predominantly involving kangaroos, wombats, and deer. The system integrates thermal and optical (CCTV-type) cameras with an artificial intelligence model trained to detect animals on or near the road. When wildlife is detected, smart advisory signage is automatically activated, delivering real-time electronic warnings that prompt drivers to slow down. The primary objective of the trial is to determine whether AI-assisted signage can effectively reduce the frequency of wildlife-vehicle collisions. Secondary objectives include assessing driver responses to dynamic speed advisories, and evaluating system performance, reliability, and maintainability under field conditions. The presentation will describe site selection and prioritisation, sign design and user testing, experimental design and early deployment outcomes, and recent efforts to consolidate wildlife-vehicle strike data across NSW. The trial builds on the success of the Large Animal Activated Roadside Monitoring and Alert System (LARRMA) trial conducted in Far North Queensland. This initiative follows the 2024 Wildlife Vehicle Strike Symposium hosted by Transport for NSW and the release of an independent review of emerging wildlife-vehicle strike technologies. See [Wildlife and vehicle collisions | Transport for NSW](#).

KEY TAKEAWAYS

1. Conference delegates will gain insights into the design, implementation, and early learnings from an innovative, data-driven approach to reducing wildlife-vehicle collisions—informing the next generation of wildlife-sensitive road infrastructure

SPEAKER BIOGRAPHY

Julie Ravallion is a Senior Specialist in the Environment and Sustainability Branch at Transport for NSW. She holds degrees in Arts and Urban and Regional Planning and has more than three decades of experience in biodiversity conservation. Julie has worked across operational, regulatory, and policy functions within the NSW National Parks and Wildlife Service, the NSW Department of Climate Change, Energy, the Environment and Water, and now Transport for NSW. Her current focus is on advancing biodiversity-sensitive transport design and applying evidence-based approaches to reduce environmental impacts from infrastructure development.