

Mr Tom Duncan
Clerk
ACT Legislative Assembly
London Circuit
CANBERRA ACT 2601

18 December 2025

Dear Mr Duncan

Tom

Thank you for your letter concerning petition E-PET-031-25, lodged by Ms Jo Clay MLA regarding a virtual fencing trial in Canberra.

Canberra's proximity to the bush makes Canberra a special place to live. Unfortunately, this also leads to unfortunate incidents where our wildlife is affected by proximity to city infrastructure.

In 2024-25, there were 4,464 macropod-related incidents reported by the ACT Parks and Conservation Service, of which the vast majority were kangaroos struck by vehicles. This is considerably higher than the average of 2,995 reported annually since 2016-17, and represents a considerable safety, cost and animal welfare concern.

Virtual fences are single solar power devices installed along roadways that emit sound and light at night when a car approaches. The sound and light emitted by the virtual fence are designed to alert wildlife to an approaching motor vehicle. Virtual fences have been trialled at various locations across Australia in an attempt to reduce the frequency of collisions between wildlife and motor vehicles.

A report commissioned by Transport for NSW in December 2024 titled "Using technology to reduce wildlife-vehicle collisions – Literature review and directions paper" discusses virtual fences and provides an overview of the research trials to date. These trials have shown mixed success and the experimental design of some studies has been criticised. The report also notes that most claims of high success rates lack scientifically robust data. Based on currently available research, there is no strong evidence to suggest virtual fences are an effective method for reducing wildlife-vehicle collisions.

The report concludes that virtual fencing should not be trialled further in its current form.

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The report states:

“Virtual fencing, in its current state, is not recommended for in-situ trialling on roads or railways in NSW or Australia. (Section 5.2.1.1). Wayside deterrents have limited effect because the effectiveness of the specific auditory and visual stimuli at alerting different species is unknown, the ability of target species to hear the stimuli above traffic noise and other disturbance is also unknown, and the ability of the system to trigger the appropriate response of targets species is unknown. Further development and testing of biologically relevant stimuli is recommended as a next step.” (page 58).

A pilot study conducted in Queensland has shown that Eastern Grey Kangaroos do respond to the sound emitted by a single virtual fence device by showing increased vigilance behaviour, but further research is required to determine the effect of the lights on kangaroos and how kangaroos respond to virtual fences in a roadside setting. Based on this information and at this early stage, it would seem premature for the ACT Government to consider a trial until a greater understanding of the specific impact and response of target species to auditory and visual stimuli is obtained. This is something that a research institution would be best placed to design and undertake.

The ACT Governments Road Safety Strategy is targeted at achieving the ‘Vision Zero’ that seeks to prevent death and serious injury to people. While kangaroo crashes can cause injury and death to kangaroos, and considerable damage to vehicles, such crashes seldom result in serious injury or death to people.

The latest crash records for Erindale Drive between Long Gully Road and Sulwood Drive, show that in the past seven years (January 2018 to December 2024) a total of 23 crashes were reported. Six were reported as collisions with animals with none of those six requiring medical treatment. The crash record for Erindale Drive does not indicate a road safety concern related to wildlife and so this location would not be a priority for wildlife collision mitigation measures on the basis of road safety crash reduction alone.

During the same period, Parks and Conservation Service rangers attended approximately 170 macropod-related incidents along that stretch of road, most of which were Eastern Grey Kangaroos. Additional collisions are likely to have gone unreported. This highlights a welfare issue for macropods and for the people involved in or witnessing these collisions. However, while this location does experience a high number of kangaroo-vehicle collisions, there are other roads with higher collision rates and decisions about installing mitigation measures at this site must be considered strategically within the context of collision rates across the whole of the ACT.

While virtual fencing may appear to be an attractive solution and I can appreciate why the petition received such strong support, the available evidence does not yet provide a strong basis to warrant support.

The ACT Government remains committed to actively engaging in the development and implementation of technologies that enhance road safety and promote animal welfare, particularly in relation to mitigating wildlife collisions. Wildlife collision mitigation measures such as underpasses and fencing have been installed on various roads in the ACT and research has been undertaken to understand the factors influencing wildlife collision rates and to identify collision hotspots. The ACT Government will continue to consider options for reducing kangaroo collisions through the new Buru (Eastern Grey Kangaroo): Controlled Native Species Management Plan which is currently open for public consultation.

I trust this information has been of assistance.

Sincerely



Tara Cheyne MLA
Minister for City and Government Services

