



## Gir Speed Monitoring System: Enhancing Road Safety

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Wildlife-vehicle collisions pose a risk, resulting in significant fatalities and injuries for humans and wildlife. Various strategies have been employed to mitigate these risks, ranging from traditional measures like fencing, underpasses, and overpasses to more advanced technological solutions. In recent years, integrating cutting-edge technology into traffic management systems has become crucial for enhancing road safety, particularly in areas where wildlife frequently crosses roads. Reducing accidents caused by speeding vehicles in areas intersecting protected areas and wildlife corridors has become a key focus.

Gujarat Forest Department is committed to adopting innovative solutions for wildlife conservation. In a major step towards safeguarding wildlife and ensuring road safety, the Gujarat Forest Department has taken a pilot project and installed the “Gir Speed Monitoring System” – an advanced sensor-based speed monitoring system with Automatic Number Plate Recognition (ANPR) and animal detection through thermal/optical cameras. The Gir Speed Monitoring System consists of thermal/optical cameras (16), PTZ camera (8), ANPR camera (4), speed radars (4), strobe lights (4), display units (20), control unit (with all the peripherals), and surveillance room secured connected to Gir Hi-Tech Monitoring Unit at Sasan-Gir. This system has been deployed on the Mendarda to Sasan road (S.H. 26), starting from the *Vaniyavaav* forest check-post and extending ~1000 meters towards Sasan.

The Gir Speed Monitoring System uses various sensors such as radar/LiDAR positioned on the road to detect vehicles and accurately measure their speed as they pass by. ANPR cameras automatically read and interpret license plate numbers of passing vehicles, facilitating vehicle identification – an important aspect for law enforcement and violation tracking. This information is then displayed on display units (LED screens) to alert drivers about their speed. The commuters are advised to keep the vehicle speed limit  $\leq 30$  km/h.



## Press Note



The thermal/optical cameras installed use state-of-the-art thermal/optical imaging technology to detect wildlife on or near the road, even during night-time or low-visibility conditions. When wildlife is detected, the system sends real-time alerts to drivers through illuminated display units (LED screens) displaying the text “Wildlife Ahead”, allowing them to slow down and proceed cautiously.

These alerts are transmitted to the surveillance room at *Vaniyavaav* forest check-post, and the system maintains a log of all the details in the control unit. This is also centrally monitored from the Gir Hi-tech Monitoring Unit at Sasan-Gir *via* a secure communication channel, helping to prevent wildlife accidents on sensitive roads. The Gir Speed Monitoring System exemplifies the Gujarat Forest Department's commitment to safeguarding commuters and wildlife while enhancing road safety in Gir.

In future, this cutting-edge technology may be replicated in other parts of the Gir & Greater Landscape, further strengthening conservation efforts across the landscape.

For more information please visit: <https://youtu.be/tScp7-oWb08>.

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# Press Note







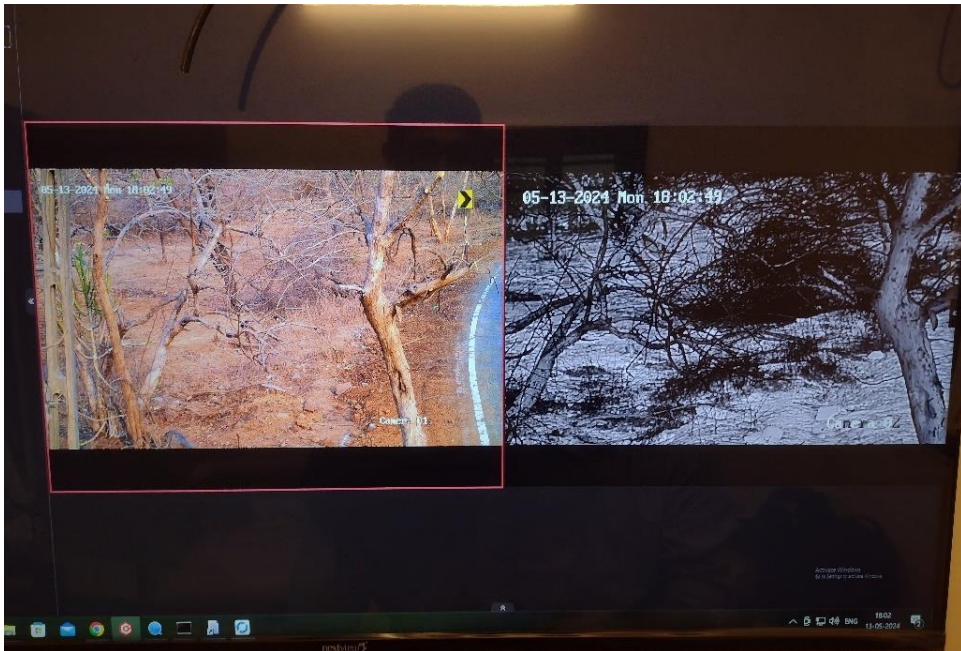
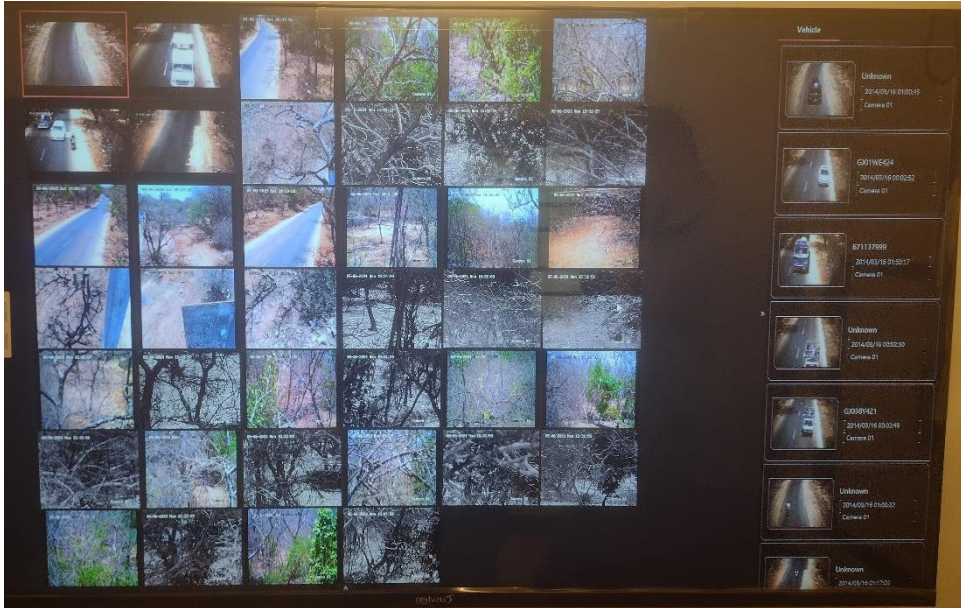
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