Higher traffic densities and community expectations for a clean environment have resulted in jurisdictions developing and adopting more stringent standards for motor vehicle emissions. This includes motor vehicle drive-by noise and noise generated by heavy vehicle engine brakes. To date, enforcement of in-service motor vehicle noise standards has been limited to stationary noise testing. This method of enforcement is labour intensive, disruptive to conforming motorists and does not correlate well with drive-by noise levels.

The South Australian Department for Transport, Energy and Infrastructure has undertaken to develop an automated system called a noise camera to identify noisy vehicles in the traffic stream. The noise camera, believed to be a world first, is capable of recording noisy vehicles based on user programmable sound characteristics.

Designed primarily to identify noisy engine brakes in accordance with Engine Brakes Noise Standards, currently being developed by the National Transport Commission, the camera can also identify noise from individual vehicles during acceleration. This presentation describes the drivers behind the development of the camera, the design of the technology, its capabilities and data collected to date.
Divisions established in New South Wales, Victoria, Western Australia, South Australia and Queensland