# ABSTRACT SUBMISSION FORM

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| Paper details | Round Table (Abstract Only) - Application of current technology to address transport problems | | | |
| **Paper title**  **(limited to 6 words)** | Electronic Vehicle Identification and Big Data | | | |
| **Overview of presentation** (300-word maximum)  Background:  The use of RFID is widespread in the supply chain and transportation industries for fleet and inventory management, toll collection and parking. Recent breakthroughs in passive UHF RFID technology have now opened up a number of avenues for the application of the technology. One of these applications is Electronic Vehicle Identification (EVI). Replacing existing vehicle registration cards with an RFID tag would allow for a non-visual contactless method of identifying registered vehicles and is a natural progression of the existing manual system to an electronic one.  The potential benefits of Electronic Vehicle Identification via RFID technology are numerous and significant. Potential benefits include:  Traffic Monitoring and Big Data: Permanent and temporary detectors installed on the road network would allow for a non invasive method of capturing data such as vehicle volumes, travel times, congestion, origin-destination, operating speeds, classification and more.  Road network management - live data would allow RCA's to detect and respond to network issues dynamically. This would include monitoring of hazardous goods on the network, dynamic tolling and the implementation of Intelligent Transport System (ITS) solutions.  Other Areas:  EVI would allow for service efficiencies across a number of areas including the vehicle service industry, police and enforcement, parking, security and many others.  Research Proposal:  The study would aim to answer the question “How effective is RFID for the purpose of Electronic Vehicle Identification in New Zealand?”, and would involve addressing the practical and theoretical issues surrounding the efficacy and feasibility of RFID based EVI in the New Zealand context.  The Presentation:  The purpose of the round table presentation would be to engage with colleagues on the topic and to strengthen the existing scope of my research proposal, explore barriers to implementation and develop solutions to identified issues. | | | | |