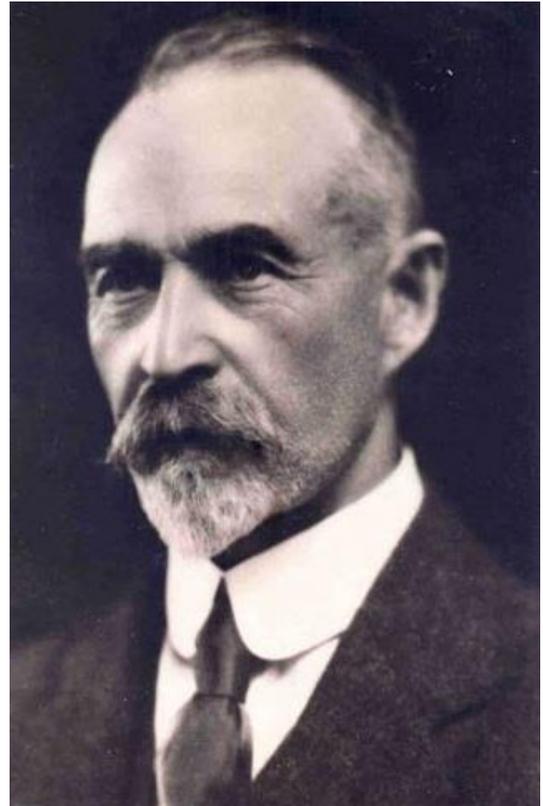


**The Science of Good Roads:
Re-Examining the Legacy of William Calder – Father of the Country Roads Board**

**Matthew Churchward,
Senior Curator, Engineering & Transport,
Museum Victoria**

In February 1913, New Zealand born surveyor and civil engineer William Calder was appointed as founding Chairman of the newly formed Country Roads Board of Victoria. Over the next three years Calder and his two fellow board members travelled the length and breadth of the state, covering thousands of miles by motor car, horse trap, horse-back and on foot, surveying the disparate collection of rough bush tracks that made up Victoria's country road network at the start of World War I. With the aid of two simple instruments – a prismatic surveyor's compass and pocket barometric altimeter – Calder undertook preliminary surveys examining the route, alignment and gradient of dozens of roads, while the Board also met with shire engineers, councillors and local business representatives from every municipality, to discuss the nature and volume of traffic on each route. The meticulous and detailed notes that Calder made during these tours would form the basis of a practical guide used by road engineers for decades, but more than this, his willing ear, careful objective analysis and quiet diplomacy laid the foundations for a successful partnership between the Country Roads Board and the State's municipal councils, that would see a road network barely fit for horse-drawn vehicles transformed into the beginnings of a well laid out modern road system designed for motorised road transport of the 20th century. As World War I drew to a close, Calder stepped up his advocacy for resources, successfully campaigning for increased State and Federal funding for roads.



This talk will begin by examining the background of William Calder before the C.R.B. – his early training and experience in New Zealand and how he rose from the position of Assistant Town Surveyor of a modest western suburban municipality to become one of the most influential and respected road engineers in Australasia. It will also review the legacy of his fifteen years at the helm of the C.R.B., examining how he transformed an initial mandate to upgrade and maintain the State's principal rural roads into an integrated network comprising 1,500 miles of State Highways, 6,500 miles of Main Roads and over 4,000 miles of Developmental Roads, and developed methods of managing and planning road infrastructure, that would be replicated both by other Australian States and the main road authorities of New Zealand and Fiji.