# ABSTRACT SUBMISSION FORM

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| Paper details | Research Paper, recommended for round table presentation | | | |
| **Paper title**  **(limited to 6 words)** | Developing a Public Transport Predictability Measure | | | |
| **Overview of presentation** (300-word maximum)  The ability to reliably predict public transport journey times is critical for network operators and transport authorities to measure, monitor, and target improvements to the public transport network, with flow-on effects for customers. Reflecting the conference theme this public transport performance monitoring is important to understanding the ‘then’ and ‘now’ in order to make improvements for ‘tomorrow’. This paper discusses NZ Transport Agency-funded research conducted between August 2016-2017 which aimed to identify and develop an optimal measure for public transport predictability. Research involved undertaking a local and international review of literature and practice of predictability/reliability measures used for public transport or private vehicle travel, and also included evaluation of measures. From this review and consideration of the potential for inter-modal and inter-regional aggregation, a shortlist of three preferred measures was developed including: Buffer Index, Modified Buffer Index, and Planning Index. Shortlisted measures were applied to a nationally aggregated set of public transport travel data from across regions and public transport modes. This data testing helped assess ‘fit’ to the NZTA [Road] Index, modification potential, and revealed that the shortlisted measures are all linearly related and there is not a strong case for one particular measure to be used. Validation workshops further revealed that stakeholders felt that selection of any shortlisted measures depended on what aspect of reliability one wanted to examine and that care needs to be taken in comparing modes and developing thresholds. Recommendations are provided for future public transport predictability monitoring in terms of measures to use, data preparation, consideration of customer perceptions of public transport reliability and potential future directions for public transport monitoring research, particularly in relation to emerging opportunities enabled by advanced technology. | | | | |