

Joanne Martin

M.Sc. Management of Information Systems 2018

## **The Potential for Cooperative Intelligent Transport Systems in Dublin City Centre: An Exploratory Study.**

Diana Wilson

Daily, the current modes of transport are causing worldwide traffic congestion and disruption problems. The steady and encouraging trend in road safety that Europe has witnessed over the last decade has subsided. Furthermore, road transport remains responsible for most transport emissions, in terms of greenhouse gases and air pollutants. The area of Cooperative ITS has accelerated in Europe after more than a decade of research and development. The EU Commission have adopted a C-ITS strategy to ensure consistent and interoperable deployment of services. The strategy instructs city authorities in EU member states to deploy C-ITS services by 2019, car manufactures have committed to the production of vehicles equipped with C-ITS technology by 2019 also. EU are confident that C-ITS has the potential to have a significant impact in counteracting the increasing problems of congestion, transport energy consumption and emissions as pilot projects are showing promising results. A dearth of research and activities has been identified in Ireland in relation to C-ITS. The objective of this research paper is to identify if the potential benefits of C-ITS services can support Dublin City Centre's current and imminent transportation objectives and challenges encompassing all modes of travel. In pursuit to address the objectives, this study carries out unobtrusive research using secondary sources, employing a qualitative content analysis and develops a framework for data analysis using a deductive approach. The findings and conclusions of this study formulate recommendations on how city authorities in Dublin can progress with C-ITS deployment. A key empirical finding of this study concluded that C-ITS has strong potential to provide solutions to several transportation challenges and objectives in Dublin City Centre. The benefitting areas were also identified This document provides precursor to future C-ITS deployments in Dublin City Centre.