

**Mohamed Jama Mohamed**

**B.Eng., MSc, C.Eng. MIET**

PhD Research Topic:  
**Impact of UberPOOL Ridesourcing  
Service on Public Transport**

Summary Note

Director of Study:	Dr. Achille Fonzone
2 <sup>nd</sup> Supervisor:	Prof. Tom Rye
3 <sup>rd</sup> Supervisor	Dr. Steve Cassidy

School of Engineering and Built Environment  
**T**ransport **R**esearch **I**nstitute  
Edinburgh Napier University

## Introduction

In many urban areas, conventional transport systems have a limited capacity and are becoming increasingly overloaded, creating increasing disruption, congestion and emissions in cities around the world. However, the new phenomenon of the 'sharing economy' is making people to re-think about how they consume mobility services in today's technologically driven lifestyles. As a result, new types of on-demand mobility services (such as UberX & UberPOOL), that use advanced technologies and ICTs are becoming popular in many cities and are expected to have a major impact on how transport services are provided and consumed.

This rapid growth of *on-demand ridesourcing service* business models that provide low-cost alternatives to car ownership, such as UberX and Lyft have triggered debates among policy makers, transport authorities and stakeholders. However, the impacts and usage patterns of these ridesourcing services is still not well understood. Key questions remain unanswered, including; how ridesourcing and traditional taxis compare with respect to trip types, customers, and locations served and whether ridesourcing services like UberPOOL complements or competes with traditional public transport services (Rayle et al. 2014).

The potentials of ridesourcing services are many, however we need to understand the real impact of services such as UberPOOL, which are providing **disruptive new mobility options** that transport authorities and policy makers are yet to keep up with. This requires extensive understanding of their impacts and consequences on a city's mobility options including traditional public transport, congestion, car ownership and land-use.

## Research Topic Overview

Using London as the case study city, the aim of this research is to understand the *impact of UberPOOL on traditional public transport*, both in terms of policy and operations and to develop clear understanding of ridesourcing services and their impact on a city's mobility options. Key objectives include improving understanding of overall impacts of new technology-enabled ridesourcing mobility services such as UberPOOL and Identifying opportunities and challenges, including potential for positive and negative outcomes for public Transport Authorities and ridesourcing service providers.

Mixed research methods will be utilized for this research (e.g. qualitative, quantitative and comparative). In addition to undertaking reviews of latest literature, online information, policy documents and official reports. Data and information will be collected by undertaking **focus groups**, **UberPOOL user surveys** and **interviews** with local transport authorities, transport operators and industry leaders / expert, this will help to get an in-depth understanding of the research topic, and provide components that will help to answer key research questions.

Key research questions include:

- Who uses UberPOOL and how much does it cost?
- How fast is the use of UberPOOL growing?
- Which type of journeys / trips has UberPOOL substituted or affected and is it helping to cut congestion?
- Do transport authorities, and the conventional public transport understand the impact of UberPOOL, if so what are they doing about it?

The research is anticipated to shed light on the impact of UberPOOL on public transport using empirical based research evidence to quantify its impacts and proposition a framework, which transport authorities can use, in order to collaborate service providers and maximize the benefits from these new technologically driven and on-demand mobility services

#### **Study visit & collaboration with MISTRA SAMS-project**

The study visit to the MISTRA SAMS project is expected to include/cover the following:

- Meet/interview leaders at the Stockholm transit agency (i.e. SLL) to understand their approach in dealing with disruptive innovations like (i.e. Uber / UberPOOL) from both policy, legislation and operations point of view.
- Meet/interview key transit operators (i.e. Nobina and Arriva etc.), who may be able to provide some perspectives on how such disruptive mobility is effecting their operations and to understand their future plans.
- Meet/interview representatives from Swedish public transport industry organisation and taxi licencing authority
- Meet/interview any other key industry leaders in Sweden (either academics/researchers, or private sector experts) to capture their perspectives so that can be added to and compared with the feedback from industry leaders from UK (London). This could include those undertaking modelling of shared mobility in Sweden, innovators.

The data and information gathered would be used to undertake comparison analysis with how London (TfL) is approaching the same issues. However, the extent of achievement from the study visit, depends on the length of the visit and ability to have meetings with key individuals within that time frame.