## An Investigation of the Operation and Performance of London Cycle Hire Scheme

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Abstract: Cycling is one of the most environmentally friendly, economic and healthy modes of transport but it needs more efficient cycle infrastructure and more effective safety measures. This paper represents an investigation into the performance and operation of the London Cycle Hire Scheme which started to operate in July 2010 using 5,000 cycles and 315 docking stations and currently has more than 10,000 cycles and over 700 docking stations across London which are available 24/7, 365 days a year. The study, which was conducted during the second half of 2014, consists of two parts; namely, the longitudinal review of the hire scheme between its introduction in 2010 and November 2014, and a field survey in November 2014 in the form of face-face interviews of the users of the cycle scheme to ascertain the existing limitations and difficulties experienced by those users and how it could be improved in terms of capability and safety. The study also includes a correlation between the usage of the cycle scheme and the corresponding weather conditions. The main findings are that on average the number of users (hiring frequency) had increased from just over two millions hires in 2010 to just less than ten millions in 2014. The field survey showed that 80% of the users are satisfied with the performance of the scheme whilst 50% of the users raised concern about the safety level of using the available cycle routes and infrastructure. The study also revealed that a high percentage of the cycle trips were relatively short (less than 30 minutes). Although the weather condition had some effect on cycling, the cost of using the cycle scheme and the main events in London had more effect on the number of cycle hires. The key conclusions are that despite the safety concern and the lack of infrastructure for continuous routes there was an encouraging number of people who opted for cycling as a clean, affordable, and healthy mode of transport. There is a need to expand the scheme by providing more cycles and docking stations and to support that by more well-designed and maintained cycle routes. More details about the development of London Cycle Hire Scheme during the last five years, its performance and the key issues revealed by the surveyed users will be reported in the full version of the paper.

Keywords: cycling mode of transport, london cycle hire scheme, safety, environmental and health benefits, user satisfaction

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