

Smart BRT Management System

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Abstract: *Bus Rapid Transit (BRT) has increasingly become an attractive urban transit alternative in many developing cities due to its cost-effective and flexible implementation. However, it still seems difficult to introduce BRT to these cities because almost all their city structures have been built solely under a road transport development city plan which causes many problems, such as urban sprawl, traffic congestion, and air pollution. This system introduced several strategies to support BRT implementation in developing cities. These proposed strategies were evaluated by applying demand forecasting and emission models to the BRT project plan. It was demonstrated that the proposed strategies could effectively improve BRT ridership, traffic conditions, and air pollution emissions of the entire system. This study could be further extended to include strategy recommendations if a BRT system was introduced to other developing cities.*

Keywords: Bus rapid transit (BRT), Intelligent Monitoring, Urban Public Transportation

REFERENCES

- [1]. Gang Xiong, Xisong Dong, Dong Fan, Fenghua Zhu-Parallel Bus Rapid Transit (BRT) operation management system based on ACP approach - DOI: 10.1109/ICNSC.2012.6204885
- [2]. Taotao Deng & John D. Nelson - Recent Developments in Bus Rapid Transit: A Review of the Literature - Transport Reviews, Vol. 31, No. 1, 69–96, January 2011
- [3]. Debapriya Tripathy, Dr. Pradeepta Kumar Samanta- Bus Rapid Transit System (BRTS) in India - ISSN (Online) 2456-1290 (IJERMCE)
- [4]. Ajay Mishra, Saxena Anil Kumar, Purohit Pradeep - Study of Bus Rapid Transit System in Respect to Growing Cities of India - International Journal of Engineering Research & Technology (IJERT) Vol. 2 Issue 10, October - 2013
- [5]. Thaned SATIENAM, Atsushi FUKUDA, Ryosuke Ohshima a study on the introduction of bus rapid transit system in Asian developing cities-IATSS Research Vol.30 No.2, 2006
- [6]. B. Hema Kumar A Novel Smart highway automated toll collection system using Raspberry PI & OpenCV Int. Journal of Engineering Research and Application ISSN: 2248-9622, Vol. 8, Issue5 (Part -II) May 2018, pp 81-85
- [7]. Prof. Swathi Somayaji B Traffic Management System A Comparative Study Journal of Engineering Research and Application ISSN: 2248-9622 Vol. 10, Issue 03 (Series -I) March 2020, pp 36-41
- [8]. <https://www.researchgate.net>
- [9]. <https://components101.com/>