

SOLUTIONS FOR TRAFFIC CONTROL AND MANAGEMENT IN VIETNAM URBAN STREETS FOR BUS RAPID TRANSIT SYSTEM

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Tóm tắt bằng tiếng Việt:

The strategy for sustainable transportation development in Vietnam nowadays is focusing on public transport as the most important and long term solution. Bus Rapid Transit (BRT) has been designed and implemented in Hanoi, then HoChiMinh and Danang in the near future. There are issues to be considered, basically how to maximize BRT's advantages to attract customers, regarding to providing transit services with high quality, punctuality and reliability. Characterized by its own exclusive lane, BRT has always prioritization at intersections as well as along routes, this creates difficulties in case of narrow streets and mixed traffic condition in Vietnam. How to allocate BRT lane or to negotiate between BRT and other transport modes in the shared lane to achieve the whole system efficiency? Actually, BRT buses run non-stop between two BRT stations in order to reach their highest economic travel speeds, therefore adequate solutions at intersections and along routes are indispensable.

This study presents design solutions for BRT lanes and prioritization on Vietnam urban streets. Case study of BRT-1 in Danang city is also conducted with the help of traffic microsimulation tools VISSIM.

Từ khóa: Bus Rapid Transit; sustainable transportation; traffic control and management; bus prioritization; mixed traffic condition.

Tóm tắt bằng tiếng Anh:

The strategy for sustainable transportation development in Vietnam nowadays is focusing on public transport as the most important and long term solution. Bus Rapid Transit (BRT) has been designed and carried out in Hanoi. It will be carried out in HoChiMinh City and Danang in the near future. There are issues to be considered. The basic one is how to maximize BRT's advantages to attract passengers, regarding to providing transit services with high quality, punctuality and reliability. Characterized by its own exclusive lane, BRT has always prioritization at intersections as well as along routes; this creates difficulties in case of narrow streets and mixed traffic condition in Vietnam. What can be done to allocate BRT lane or to negotiate between BRT and other transport modes in the shared lane to achieve the whole system efficiency? Actually, BRT buses run non-stop between two BRT stations in order to reach their highest economic travel speeds, therefore adequate solutions at intersections and along routes are indispensable.

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Key words: Bus Rapid Transit; sustainable transportation; traffic control and management; bus prioritization; mixed traffic condition.