**BUS LANES WITH INTERMITTENT PRIORITY**

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**ABSTRACT**

Exclusive bus lanes provide a very high level of priority for transit operations, especially for Bus Rapid Transit (BRT) and Express service but these lanes could be under utilized and be a source of extra capacity if they could be shared in an intelligent way. This paper explores the benefits of providing intermittent priority, called Bus lane with intermittent priority (BLIP), of these exclusive bus lanes. Intermittent priority can be implemented by allowing vehicles to use the lane when a BRT or Express bus is not present. Drivers can be alerted when a bus is in the lane using either infrastructure based signs, or in the future using infrastructure-to-vehicle (i2v), or connected vehicle (CV) communications. Some critical operating parameters for implementing BLIP system including clear distance, degree of saturation (volume-to-capacity ratio), CV penetration and bus departure/headway frequency have been investigated in this paper.



