

On the capacity of isolated, curbside bus stops

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Abstract

The maximal rates that buses can discharge from bus stops are examined. Models were developed to estimate these capacities for curbside stops that are isolated from the effects of traffic signals. The models account for key features of the stops, including their target service levels assigned to them by a transit agency. Among other things, the models predict that adding bus berths to a stop can sometimes return disproportionately high gains in capacity. This and other of our findings are at odds with information furnished in professional handbooks.

Keywords: Bus-stop capacity; Bus queueing; Bus congestion