ABSTRACT

The Determination of Amount and Location of Bus Stop for Transjabodetabek Ciputat – Blok M Route Using Set Covering Problem Model.

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South Tangerang City is one of the buffer areas around Jakarta. Since October 1st 2014 the Djakarta Passenger Transport Company (Perum PPD) has officially launched 10 units bus of the Transjabodetabek Ciputat – Blok M in the Ciputat PPD pool. This is one of the government's efforts to facilitate the citizens of South Tangerang City to Jakarta with affordable and easy costs. This bus is connected to the Transjakarta's bus stop so that Ciputat people who want to go to the middle of Jakarta City or the farthest areas that are still reachable by Transjakarta don't need to change to the other modes. Optimizing the operation of Transjabodetabek bus on the Ciputat – Blok M route require supporting facilities such as bus stop location. In this research, the amount and location of the bus stop is determined by identifying the location of trip generation with a relatively high level of demand and candidate location of the bus stops. Location of the selected bus stops is determined using the set covering problem model, with the results of the calculation conclude that there are 17 chosen bus stop locations alongside the route.

Keywords: Bus Rapid Transit, Bus Stop, Location Determination, Set Covering Problem.

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