

ABSTRACT

This research aim is to evaluate the performance of DAMRI bus Air Conditioning type which serve route of Ngaliyan to Pucang Gading and BRT which is adapted from mass rapid transport system as mass transport in Semarang. Both, have similarity in service, facility and track. The difference is DAMRI has more flexibility stop point than BRT. But, BRT has more efficient travel time because of its fixed stop point.

Evaluation is measured by the existing parameters and standard. The value of travel time, travel speed, load factor, cost and income, and service performance is derived from analyzing and field observation.

Analyzing and field observation shows different value for both of mass transport. Travel time value for DAMRI is in 71 minutes to 112 minutes and 24 seconds range during peak time and 71 minutes and 1 seconds to 96 minutes and 4 seconds range during off peak time. Travel time value for BRT shows faster number. It's 70 minutes and 50 seconds up to 100 minutes during peak time and 72 minutes up to 89 minutes during off peak time. As the travel time's value, Travel speed of BRT is also faster than DAMRI. BRT's mean travel speed is 21,1 km/hour meanwhile DAMRI shows 14,6 km/hour. Load factor value for DAMRI is 66,2% and BRT is 29,8%.

DAMRI shows three kind Break even point cost. First cost is Rp 5.632,84 for Ngaliyan to Pucang Gading trip but only in morning peak time, for the other time, it shows Rp 5.379,11 for the same route. And the third cost is Rp 5.429,86. It's showed while it's pucang gading to ngaliyan trip. For BRT, it only shows two Break even point cost. It's Rp 6277,52 for Mangkang to Penggaron trip and Rp 6.692,95 for the counter route.

Performance of both mass transport is rated by standard of total value that issued by Dirjen Perhubungan Darat. It's rated "average" by getting 17 points

Keywords : mass transport evaluation, travel time, travel speed, load factor, Break Even Point