Mass Transportation Study Demand of Bus as Alternative transportation on Jayapura - Sentani Airport Route

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ABSTRACT

Sentani Airport is one of airport in Papua Province with number of movement of passenger increased significantly in every year. The improvement is resulted increasing of route and number of air transports. At the height of passenger current either arrival or departure results the increasing of request of supporting facilities for public transport from Jayapura to Sentani Airport and also on the contrary. The problem is number of public transport from Jayapura to Sentani Airport very limited, so that passenger tends to applies private car. Affect the many private car usages causes traffic density to become increasing and finally can generate traffic jam.

Aim of research is to analyze public probability chooses bus as alternative public transport from Jayapura to Sentani Airport based on sensitivity of travel time, travel cost, and to get number of requirement of bus needed. Method in this research is Logit Method with approach to Stated Preference, and a cost analysis using by PCI method and logistics regression.

From this research have result by vehicle usage probability of person which will make a move applies bus equal to 0.418%, cab consumer probability which will make a move to bus equal to 0.991%. While transportation amounts required 36 of buses with service of bus is having capacities 29 passengers.

Keywords: probability of Bus Choice, binary logit, stated references, logistics regression.