

**ABSTRAK**

Judul : Analisis Pengaruh Wabah Covid-19 Terhadap Pelayanan Operasional Kereta Rel Listrik (KRL) Pada Lintas Bogor – Manggarai. Nama: Nova Amelia Boru Simaremare, NIM : 41119110159, Dosen Pembimbing : Ir. Aditia Kesuma Negara D, ST., M.Sc., IPM., ASEAN Eng Tahun : 2021

Kereta Rel Listrik (KRL) merupakan sarana transportasi umum yang cukup memadai untuk digunakan oleh masyarakat umum dalam jumlah besar di Kawasan Jabodetabek. Namun sejak Pemerintah menetapkan wabah Corona Virus atau Covid -19 sebagai Bencana Nasional di Indonesia pada Maret 2020, hal ini berdampak pada berbagai aktifitas atau pun kegiatan masyarakat dan juga berdampak pada pelayanan operasional Kereta Rel Listrik (KRL). Tujuan dari penelitian ini untuk mengetahui kapasitas penumpang, kapasitas lintas dan lama waktu *headway* yang diperlukan KRL selama pandemi Covid-19 dimana mulai diberlakukannya Pembatasan Sosial Berskala Besar (PSBB), menganalisis faktor-faktor yang mempengaruhi pelayanan operasional KRL selama pandemi Covid-19, mengetahui perbandingan jumlah penumpang dengan kapasitas angkut KRL dalam satu kali perjalanan kereta sebelum dan selama pandemi Covid-19 dengan adanya arahan pemerintah diberlakukan Pembatasan Sosial Berskala Besar (PSBB), dan memprediksi *headway* baru jika kondisi wabah covid-19 menjadi standar pelayanan operasional KCI lintas Bogor-Manggarai

Metode analisis yang digunakan dalam pelaksanaan kuesioner adalah analisis deskriptif kuantitatif dan statistik dengan metode analisis data Regresi Linier Berganda dengan bantuan Aplikasi Program SPSS 21 for Windows. Data yang digunakan adalah data primer dan sekunder. Penelitian ini menggunakan 100 responden sebagai sampel penelitian.

Berdasarkan hasil pengamatan dilapangan dalam penelitian ini juga dilakukan matrikss perbandingan saat keadaan normal atau sebelum virus covid-19 mewabah dan saat virus covid-19 telah mewabah di Indonesia, tepatnya saat jam sibuk antara pukul 06.00 hingga pukul 09.00 WIB. Terdapat perbedaan seperti : kapasitas penumpang saat sebelum wabah virus covid-19 yaitu 1216 orang dalam sekali perjalanan dan saat wabah sebanyak 592 orang. Pada *headway* juga terdapat perbedaan dimana sebelum wabah lama *headway* 5 - 18 menit dan saat wabah 5 – 15 menit antar kereta, dan perkiraan *headway* baru yang diperhitungkan kembali yaitu 2 - 8 menit antar kereta. Dengan adanya perbedaan *headway* mempengaruhi kapasitas lintas kereta dimana dengan *headway* saaat sebelum wabah virus covid-19 kapasitas lintas sebanyak 134 kereta/perhari, saat wabah covid-19 kapasitas lintas sebanyak 112 kereta/hari dan dengan perhitungan *headway* baru maka kapasitas lintas sebanyak 252 kereta/hari. Dengan perubahan beberapa system pelayanan operasional untuk menyesuaikan kondisi saat ini, PT Kereta Commuter Indonesia juga melakukan tindakan dan aturan aturan baru bagi pengguna jasa layanan untuk tetap melaksanakan protokol kesehatan sesuai anjuran dan arahan pemerintah.

**Kata kunci** : Covid-19, *Headway*, Kapasitas lintas, KRL

**ABSTRACK**

*Title: Analysis of the Effect of the Covid-19 Outbreak on Operational Services for Electric Rail Trains (KRL) at the Bogor - Manggarai Cross. Name: Nova Amelia Boru Simaremare, NIM : 41119110159, Supervisor : Ir. Aditia Kesuma Negara D, ST., M.Sc., IPM., ASEAN Eng Year : 2021*

*Electric Rail Train (KRL) is a public transportation facility that is adequate to be used by the general public in large numbers in the Greater Jakarta area. However, since the Government declared the Corona Virus or Covid-19 outbreak a National Disaster in Indonesia in March 2020, this has had an impact on various community activities or activities and also has an impact on the operation of Electric Rail Train (KRL) services. The purpose of this was to determine passenger capacity, cross capacity and the length of headway required by KRL during the Covid-19 pandemic where the Large-Scale Social Restrictions (PSBB) were enacted the number of passengers with KRL carrying capacity in one train trip before and survived the Covid-19 pandemic with the government directive to apply Large-Scale Social Restrictions (PSBB), and predicting a new headway if the Covid-19 outbreak conditions became the standard operational service for KCI across Bogor-Manggarai.*

*The analytical method used in the implementation of the questionnaire is descriptive quantitative and statistical analysis with Multiple Linear Regression data analysis method with the help of SPSS 21 Application Program for Windows. The data used are primary and secondary data. This study used 100 respondents as the research sample.*

*Based on field observations in this study, a comparison matrix was also carried out when conditions were normal or before the Covid-19 virus outbreak and when the Covid-19 virus has plagued Indonesia, precisely during peak hours between 06.00 and 09.00 WIB. There are differences, such as: the passenger capacity before the covid-19 virus outbreak was 1216 people in one trip and during the outbreak as many as 592 people. In the headway, there are also differences where before the outbreak the old headway was 5-18 minutes and during the outbreak it was 5-15 minutes between trains, and the estimated new headway was recalculated, which was 2-8 minutes between trains. With the difference in headway affecting the cross-train capacity, with the headway before the covid-19 virus outbreak, the traffic capacity was 134 trains/day, during the covid-19 outbreak the traffic capacity was 112 trains/day and with the new headway calculation, the traffic capacity was 252 trains/day. With changes in several operational service system to adapt to current conditions, PT Kereta Commuter Indonesia also takes actions and new rules for service users to continue to implement Health protocol according to government recommendations and directions.*

**Keywords :** Covid-19, Headway, Cross Capacity, KRL