SUMMARY

Fauzan Roziqin, Department of Urban and Regional Planning, Faculty of Engineering, University of Brawijaya, April 2017, The Impact of Industrial Vehicles Movement to The Road's Level of Services in The City of Malang, Supervisor: Imma Widyawati Agustin, ST., MT., Ph.D and Yeni Sumantri, S.Si., MT., Ph.D.

Malang is a great city that has a diverse industry characteristics and the numbers are spread in every district. The goal of industry movement is shipping and distribution. It has a problems related to level of service, especially several points of delay and congestion due to the movement and the volume of vehicles as well as the limited capacity of existing roads. It encourages researchers to conduct research related to how much influence the movement of the industry to the performance of existing roads in the Malang City. This study aims to identify the characteristics of large and medium industries in the Malang City, the pull model of large and medium industries, the influence of large and medium industries vehicles movement on the level of service and how they plan the solution of that problem. The analysis used is mapping the distribution of large and medium industries, mapping the performance analysis to determine the condition of existing traffic, correlation analysis to determine the influence variables used and multiple linear regression analysis to identify the pull model of land use. Results from these studies is the dissemination of type industry in the Malang City, ILMETTA, IATT, Agronomy-chemistry, Sentra and Large Industries. Determining the location of the main observation is based on the distribution of industry, the directly ownership great impact on the road, and the national road class that is located in Sunandar Priyo Sudarmo Street. The kind of land use in Sunandar Priyo Sudarmo Street is industrial, healthcare, office and domination of trade and services. The most affected variables of the industry movement are the number of employees (X3) and the delivery frequency (X6) with a model Yindustry = 5.104 + 0.736 (X3) + 1.832 (X6) with 94.1% R square. The average performance of the Sunandar Priyo Sudarmo Street is C. Besides, the influence of the industry vehicles movement to the level of service is 13.77-22.13% of the vehicles total volume on the road. Plans to deal the problems are enlargement the road amount 0.5 m on the right and left side and the selection of alternative routes for industrial vehicles that pass through the Terusan Batubara Street, Tenaga Utara Street and LA Sucipto Street.

Keywords: Large-and-Medium-Industry, Multiple-Linear-Regression, Level-of-Service

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