

IMPACT OF MINERALS FREIGHT AND LOGISTIC OPERATIONS TOWARDS KUANTAN TRAFFIC FLOW

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Abstract:

Mineral's products are used in daily life all around the world and one of the major sources in economic for many countries. There were various types of minerals such as gold, tin, iron ore, bauxite and others. Malaysia was one of the largest producers of bauxite in the world and in between year 2013 and 2016, the famous mining operations were located in Kuantan. Many issues related to the mineral freight logistic operation had been arises during those years, including highly interrupted traffic flow due to high numbers of heavy lorry transporting those minerals especially bauxite. In order to determine the impact of mineral freight logistic operations including bauxite, study on the traffic capacity has been initiated. The study started with identification of problematic area along the most popular route used for minerals logistic operation to and from Kuantan Port and storage area that is Federal Road 3. Several intersections have been determined to be badly affected by the minerals logistic operations. Traffic characteristic of the highly affected intersection, such as peak hour volume, saturation flow and capacity when vehicles passing through the intersection were collected and analysed to evaluate the intersection's current Level of Services (LoS) after having a massive increase in numbers of heavy vehicles generated from mineral's logistic and freight operations. The result shows that the current Level of Services (LoS) at intersection were at range LoS A to LoS E.

Keywords : Mineral Products; Logistic; Minerals Mining; Mineral Transportations.

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