## GEOGRAPHICALLY WEIGHTED REGRESSION (GWR) ANALYSIS WITH COMPARE FUNCTION OF KERNEL GAUSSIAN AND KERNEL BISQUARE FOR MODELING THE NUMBER OF MOTORIZED VEHICLES IN EVERY PROVINCE IN INDONESIA

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## ABSTRACT

Indonesia has become one of the most human populations most of countries in the world. Increasing number of the population, causing the increased demand required by Indonesians. Calls to the various the need, is one of the factors encourage the development of progress in various areas pertaining to community needs, including demand a transportation. According to BPS there has been increasing the number of motor vehicles that is quite high 9,13 percent of year. The increase in the number of motor vehicles are high happened on a motorcycle 9,48 percent of year followed then by a passenger car, freight cars and bus each 9,0 percent, 7,45 percent and 1,80 percent of year. Data analyzed is secondary data statistics transport 2015 taken from Badan Pusat Statistik. Methods used in this analysis is Geographically Weighted Regression (GWR) and make a best to function kernels Gaussian and kernels Bisquare for data motor vehicles in every province in Indonesia in 2015. From the analysis it is known that kernels Bisquare better than function kernels Gaussian and produce model local 6.

**Keyword**: Geographically Weighted Regression, Motor Vehicle, kernel Gaussian, kernel Bisquare.