

## **ABSTRACT**

*Vehicular Ad-Hoc Network (VANET) is a network consisting of a set of wireless mobile nodes that communicate with each other without any fixed infrastructure. Mobility Mobile Node (MN) in VANET is very high and cause the MN IP change often. Based on the network conditions are changing the connections that occur between the Mobile Node (MN) becomes distracted and disconnected for a few seconds. In addition, large delay and throughput smaller with high packet loss in an area where the number of MN increased significantly.*

*This simulation the performance comparison between the performance of Mobile IPv6 network (MIPv6) and Hierarchical Mobile IPv6 (HMIPv6) uses UDP transport agent with some CBR data packet size. Based on the main parameters in determining the quality of the network will be compared and the value obtained from the handover latency, by measuring packet loss, throughput, delay. Based on the results of the literature study HMIPv6 has a better network performance than MIPv6 because of the results of the research data showed that in HMIPv6 has a smaller both packet loss also delay and greater throughput than MIPv6*

**Keywords :** VANET, MIPv6, HMIPv6, comparison.