Value-of-time (VOT) measures are valuable in a wide range of transport planning and policy implementation. Delay and travel time can be converted to monetary units through the concept of VOT. Numerous studies have been conducted to determine this measure, and a variety of methods have been explored. Within the transport literature, econometric approach has widely been used to obtain this measure. Mostly, it is derived by estimating models from the logit family for mode choice and route choice, where travel time and travel cost variables are used as part of the utility function, and the ratio of their estimated parameters is termed as VOT. Within the Kingdom of Saudi Arabia (KSA), VOT studies are very rare. There exist a few mode choice modeling studies based on the revealed preference dataset, where multinomial logit models are estimated. However, the focus of these studies is limited and VOT measure is not explicitly discussed. In the context of King Fahd Causeway that connects KSA with Bahrain, VOT measures of its users are very vital to know. This is because both governments are keen to introduce alternative modes for the users of the causeway to reduce travel time and delays [1].