Electronic Toll Collection System

A toll road is a privately or publicly built road for which a driver pays a toll (a fee) for use. Structures for which tolls are charged include toll bridges and toll tunnels. The building or facility in which a toll is collected may be called a toll booth, toll house, toll plaza, toll station, toll bar or toll gate. This building is usually found on either side of a bridge and at exits. India is developing rapidly in technology in all departments. An adaptation of RFID technology, called electronic toll collection, is lessening the delay incurred in toll collection. Electronic toll collection system is planned to be introduced by the NHAI (National Highway Authority of India) in 2012. The electronic system determines whether a passing car is enrolled in the program, alerts enforcers if it is not. The accounts of registered cars are debited automatically without stopping or even opening a window. Electronic toll collection systems rely on four major components: automated vehicle identification, automated vehicle classification, transaction processing, and violation enforcement. Automated vehicle identification (AVI) is the process of determining the identity of a vehicle subject to tolls. The majority of toll facilities record the passage of vehicles through a limited number of toll gates. At such facilities, the task is then to identify the vehicle in the gate area. Automated vehicle classification is closely related to automated vehicle identification (AVI). Most toll facilities charge different rates for different types of vehicles, making it necessary to distinguish the vehicles passing through the toll facility. Transaction processing deals with maintaining customer accounts, posting toll transactions and customer payments to the accounts, and handling customer inquiries. The transaction processing component of some systems is referred to as a "customer service center". In many respects, the transaction processing function resembles banking, and several toll agencies have contracted out transaction processing to a bank. A violation enforcement system (VES) is useful in reducing unpaid tolls, as an unmanned toll gate otherwise represents a tempting target for toll evasion. Several methods can be used to deter toll violators. Main Objective is to provide the security for transaction process via bank.