Abstract

The uncontrollable increase in the number of vehicles, together with the unregulated urban growth, has led to an increase in the parking needs. Parking needs are very high in areas like shopping centers, hospitals, university campuses and airports in which the traffic could be very intense. Building parking lots that will occupy large areas is quite important both in terms of traffic flow and passenger circulation. In this regard, it is very important to design and efficiently use parking spaces within large buildings. In this study, the above mentioned large-scale parking places have been analyzed according to the vehicle sizes that showed variations over the years and the parking scenarios. For this purpose, Süleyman Demirel University (SDU) main parking area has been chosen. The main reasons for this choice are the intensive daily traffic in the area and the variety in the vehicles that park there. Future applications of this study in a bigger scale could make it possible to develop new design standards and specifications to be used all over the country.