

# GIS-Based Visualization for Estimating Level of Service

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## SUMMARY

Traffic congestion is the biggest problem in Turkey, especially in Istanbul. People have a hard time because of the traffic problems, which causes accident and deaths in Istanbul. In this regard, in order to minimize those kind of problems, the concept of safety level of service (LOS) at a section existing on the Trans European Motorway and D-100 state roadway having huge traffic congestion especially in peak hours is determined with the help of using Geographic Information Systems, which is the objective of this study. According to Highway Capacity Manual, volume-to-capacity (V/C) ratios and density of vehicles are used for the estimation of LOS for selected motorway segments requires. In this paper, types of LOS will be assigned for the concerned road sections and those of which will be visualized in a cartographical way. In this context, some recommendations will be given in order to solve some traffic congestion related problems about the road.