

Speed Profiling on Roads of New Delhi

AUTHORS:

Sudatta Mohanty

3rd Year B.Tech, Department of Civil Engineering, IIT Delhi

Anubhav Kumar

3rd Year B.Tech, Department of Civil Engineering, IIT Delhi

SUPERVISOR:

Professor Geetam Tiwari

Professor, Department of Civil Engineering, IIT Delhi

Abstract - Study of transportation systems at various levels of organization has gained increased importance in recent times and is a rapidly advancing field in transportation engineering. With increased capabilities of Geographic Information Systems, the concept of developing a complete virtual transportation model of the entire globe has become a bright prospect.

Speed profiling of data has direct applications in developing Intelligent Transportation Systems (ITS) and in analysis of efficiency of existing road networks. The prime objective of this project was to develop a speed profile map for the complete road network of the city of New Delhi. As a result of the accompanied analysis that was done on the resulting spatial database, some vital correlations were developed between Accident prone areas and peak speeds, variation of speeds with time of day, average speeds on roads classified on the basis of Right Of way and variation of rates of acceleration and deceleration near intersections.

The completion of the project yielded a complete spatial database of average speeds on roads of New Delhi having a Right of Way greater than 30 m accompanied with the attributes – accidents, time of day, acceleration and deceleration rates. The database is of prime utility for any primary or auxiliary analysis relating to variation of speeds.

References

The archived submission did not contain a separately labelled references section.