

SAFETY ON HIGHWAY WORK ZONES AND SPEED MANAGEMENT

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Background Crash rates on highway work zones have been found to be higher than other locations in many countries. This is an important consideration for India since government has launched a major highway expansion programme. A recent study of NH-28 in India shows the inadequacy of current traffic management and safety practices at work zones. One of the important objectives of Traffic Management Plans (TMPs) is to ensure safe speed in working zones. However, effectiveness of current practices on speed management has not been documented. NH-8 has been selected for the study where six-laning is being done.

Objectives To examine characteristics of vehicle speeds in Advance Warning Zone (AWZ), Working Zone (WZ) and Terminal Transition Zone (TTZ) on eight selected sections of NH-8.

To find the effectiveness of existing Traffic Management Plans (TMPs) implemented on Highways.

Methodology Speeds on AWZ, WZ and TTZ were recorded and individual as well as combined analysis has been done for different categories of vehicles.

The mean speeds, SD, 85th percentile speeds and percentage of vehicles exceeding the speed limit were determined.

Results It was observed that the mean speed and 85th percentile speed of vehicles in all the three traffic control zones is more than the posted speed limit of 40 km/h. t-Test results show that there is no significant difference in the speed of vehicles in three traffic control zones at 95% CI.

Significance/Contribution to the Field The results of the study would help transportation planners and engineers to understand the impact of existing TMPs on speed control in working zones.