

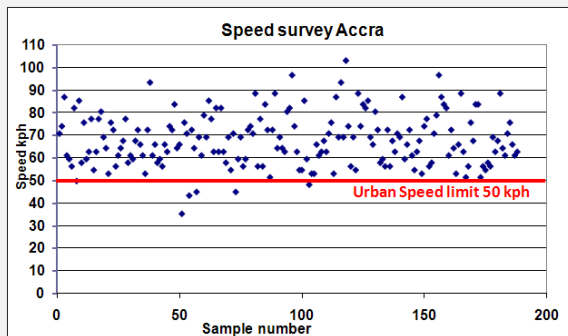
SPEED STUDY ACCRA, GHANA



Date started: November 2006 **Date finished:** November 2006

Partners: Ghana Police Service

Cost/time/resources: 1000 USD - 2 days for survey



The results of a speed survey in Accra indicate that the urban speed limits are being disregarded by nearly all drivers and that vulnerable road users are at extreme risk of severe injuries from the high urban speeds.

Research provides clear evidence that, in any given situation, higher speeds mean more crashes and more severe injuries. While most vulnerable unprotected road users survive if hit by a car travelling 30 km/h, the majority are killed if hit by a car travelling at 50 km/h. Reducing the speed – especially for the fastest drivers – would yield the great benefits in reducing death and injury.

Summary project sheet.

Objectives and scope

The scope for reducing crashes by means of speed management depends on the operational characteristics of the road. The reduction achievable per 1mile/h reduction in average speed varies according to the road type and the average traffic speed. On average, research shows the reduction to be:

- about 6% for urban roads with low average speeds;
- about 4% for medium speed urban roads and lower speed rural main roads;
- about 3% for the higher speed urban roads and rural main roads.

This study provided baseline data from 6 major link roads in Accra. The urban speed limit for Accra is 50kph on all roads (including dual and triple carriageways). The speed limit signs are few and they appear to be distributed in a random manner. There is a general assumption that drivers know that the urban speed limit is 50kph.

Activities

The speed survey in Accra was conducted using a calibrated Muni Quip K-GP Radar speed gun. There is a systematic error in the data due to the observer being off of the highway and at an angle to the line of traffic flow. The error means that the recorded speeds are slightly lower than the actual speeds. No correction has been made for this in the data presentation above. Covert speed readings were taken from a parked vehicle with the radar operated within the vehicle through the window. Locations were chosen where vehicles were in free flow conditions during off-peak times (after 10:00am and before 16:30pm). When vehicles were travelling in convoy, the speed of the lead vehicle was recorded as the free flow speed.

Conclusion and main lesson learnt

The results clearly indicate that the urban speed limits are being disregarded by nearly all drivers. The results indicate that drivers are exceeding posted limits (50kph) by as much as 50kph and that vulnerable road users are at extreme risk of severe injuries from high urban speeds. In many European countries, highways of this design standard would have a higher limit. However, there are strong arguments against raising the limit in this case because of the high level of pedestrian activity on all roads in Accra. Drivers do not readily give precedence to pedestrians on crossings and a higher speed limit would make pedestrian crossing even more hazardous. The study report, presented to the NRSC, made a series of recommendations, including more rigorous enforcement of speed limits in urban areas.