behaviour patterns, the most vulnerable age groups at risk, the land-use pattern in areas where victims were most involved, the degree of injury sustained, vehicle speeds/characteristics at the time of impact and the characteristics of drivers who were responsible. Pedestrian deaths sometimes result not because of the severity of injury, but the lack of first aid or ambulance service, the absence of a hospital, clinic or health centre in the vicinity of the accident, or the lack of essential drugs and necessary medical equipment at the time of arrival in the hospital (facilities which are not adequately available as in developed countries). All these factors are also under investigation for both urban and rural areas to establish their contribution to pedestrian deaths.

At the national level, existing data revealed that, on the average, 29% of all accidents were pedestrian accidents and the most vulnerable was the 6-10 years age group accounting for 18% of all casualties. Most of these were school pupils in the urban centres.

In an epidemiological survey of pedestrian injuries carried out for the city of Kumasi, injuries to the lower part of the body were the most predominant injury type sustained by non-fatal pedestrian accidents followed by injuries to the head, chest and abdomen. Socio-economically, the injuries also exacted a great toll on the victims. Resulting disabilities lasted more than 50 days on average. Sixty percent of the injured victims reported a significant decline in income and
many families had to borrow money to pay for medical treatment or make up for lost income resulting in debts. Currently another research project is underway, to establish the road safety awareness of school pupils.

3.2 Motor vehicle accidents

Research in this respect investigates general driver characteristics, the condition of vehicles before an accident and the safety of passengers aboard the vehicle. It seeks to address the question, “what are the major causes of motor vehicle accidents in Ghana? Are they a result of drunk driving, vehicle mechanical failure, negligence on the part of the driver, fatigue, etc?” Unlike the developed countries, culture and traditional beliefs play key roles in human behaviour in Ghana and these are all under investigation to establish their influence or otherwise on motor vehicle accidents.

One fundamental problem identified from a driver study was the fact that many motorists have not undergone any formal driver training and testing before being issued with a driving license and in order to address this perennial problem, the former Vehicle Examination and Licensing Department which was under the Ministry of Roads and Transport has been reconstituted and renamed as the Driver and Vehicle Licensing Authority (DVLA) with full autonomy. The new body has been set the task to withdraw all old licenses in the system and issue new ones, which are computer mediated and machine-readable. Under the new system, it would be very easy to build up a driver’s history of traffic violation, making it possible to take unsafe drivers off the road. In the long term the DVLA would ensure that new would-be drivers have undergone thorough driver training and testing before being issued a driving license.

Another study conducted to establish the major causes of motor vehicle accidents revealed that, over 50% of all motor vehicle accidents were due to no-driver-error and sheer negligence. It was also discovered that, unconsciously drivers were less careful because of their low casualty rate. They accounted for only 18% of all motor vehicle casualties, while passengers accounted for 56%. Thus, in the developed countries, while road safety efforts are directed at enhancing the safety of drivers because of the high vehicle ownership ratio per household, in Ghana efforts are being directed as to how best to make passengers more safe.

3.3 Accident black spot identification and investigation

Another area of activity of the division is accident black spot identification and investigation. Locations on the country’s road network with high clusters of accidents are identified and investigated to establish a pattern of accident occurrence (Photos 2 and 3). These are further examined to establish the probable underlying cause(s). Where necessary, this is supported by site visits after which suitable remedial measures are recommended for implementation.

The major consumers of our research findings are the Ministry of Roads and Transport, the Ghana Highway Authority (GHA), the Department of Urban Roads (DUR), Traffic Police, and the National Road Safety Commission (NRSC). Should research findings mean the need for new laws or amendments of existing ones, it is communicated to the Ministry for onward transmission to parliament. Any findings with respect to black spots or other dangerous locations or problem areas on the road network are communicated to the two road agencies, namely, the Ghana Highway Authority - the agency responsible for all inter-regional trunk roads, and the Department of Urban Roads - the agency responsible for all city roads. Areas requiring emphasis by way of education, public awareness and enforcement are sent to the NRSC and Traffic Police. There have also been many occasions when GHA and DUR have contracted the division to investigate particular routes in specific regions and cities and come out with solutions for implementation. Our research findings are also made known to the rest of the world through publications in international journals, seminars and conferences.