

- (iv) The Ministry has formulated a multi-pronged strategy to address the issue of road safety based on 4 'E's viz. Education, Engineering (both of roads and vehicles), Enforcement and Emergency Care. Based on this, a draft action plan has been shared with the States.
- (v) Road Safety has been made an integral part of road design at planning stage.
- (vi) Road Safety Audit of selected stretches of National Highways has been taken up.
- (vii) High priority has been accorded to identification and rectification of black spots (accident prone spots) on national highways. A total of 789 such black spots have been identified for improvement.
- (viii) The threshold for four laning of national highway has been reduced from 15,000 Passenger Car Units (PCUs) to 10,000 PCUs. About 52,000 Km of stretches of State Highways has been identified for conversion to national highways.
- (ix) Setting up of model driving training institutes in States and refresher training to drivers of Heavy Motor Vehicle in the unorganized sector.
- (x) Advocacy/Publicity campaign on road safety through the electronic and print media.
- (xi) Tightening of safety standards for vehicles like Seat Belts, Power-steering, anti-lock braking system etc.
- (xii) Providing cranes and ambulances to various State Governments under the National Highway Accident Relief Service Scheme for development on National Highways. National Highways Authority of India also provides ambulances at a distance of 50 Km. on each of its completed stretches of National Highways under its Operation and Maintenance contracts.

#### **Road Research Institutes**

418. SHRI TIRUCHI SIVA: Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

- (a) the number of Road Research Institutes in the country;
- (b) the details of the areas of research undertaken at these institutes and the major feats achieved by them;
- (c) whether Government proposes to establish Central Road Research Institute-like institutions in the country; and

(d) if so, the details thereof, along with the proposed sites, timelines and cost estimates?

THE MINISTER OF STATE IN THE MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (SHRI MANSUKH L. MANDAVIYA): (a) There is only one exclusive Road Research Institute namely Central Road Research Institute (CRRI), New Delhi under Council of Scientific and Industrial Research (CSIR) in the country.

(b) The areas of research undertaken by CRRI are in the field of Geotechnical Engineering, Pavement Engineering and Materials, Bridge Engineering and Structures, Traffic and Transportation Engineering etc. The CRRI has developed several technologies/procedures/methods for construction and maintenance of Indian roads such as cold mix and warm mix technologies for bituminous roads, use of waste plastic, industrial waste, mastic asphalt and micro-surfacing, design and specifications for construction and maintenance of roads and bridges, procedures for road safety measures, use of flyash in road embankment, methods for maintenance of cement concrete roads, vehicle mounted automatic controlled Mobile Bridge Inspection Unit, GIS based highway information system, bridge maintenance and management system, car driver simulation system, pot hole repair solution, soil nailing etc. The most of them have been adopted/used by Indian Road Congress (IRC)/Bureau of Indian Standards (BIS) in framing code of practice/specifications/guidelines for construction and maintenance of roads.

(c) No Sir.

(d) Does not arise.

#### **New Construction Index for determination of toll rates**

419. SHRI PALVAI GOVARDHAN REDDY: Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

(a) the details of the New Construction Index that NHAI is proposing to determine toll rates;

(b) whether some of the toll plazas have been removed, like the toll plaza on NH-8 in Gurgaon and DND Flyway in Delhi;

(c) if so, the reasons therefor; and

(d) how Construction Index helps in keeping toll rates reasonable, transparent and justified?

THE MINISTER OF STATE IN THE MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (SHRI MANSUKH L. MANDAVIYA): (a) and (d) National Highways