

SAFE SAVARI NEWSLETTER ON ROAD SAFETY

KSCSTE-NATIONAL TRANSPORTATION PLANNING AND RESEARCH CENTRE

के एस सी एस टी इ - राष्ट्रीय परिवहन योजना एवं अनुसंधान केंद्र കെ എസ് സി എസ് ടി ഇ- ദേശീയ ഗതാഗത ആസൂത്രണ ഗവേഷണ കേന്ദ്രം



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Editorial

Pedestrians are often referred to as vulnerable road users, borne out by the fact that they comprise over 20 percent of those killed on the roads. There is a need to raise awareness of the dangers to pedestrians, to reduce deaths and injuries. Common categories of pedestrian safety strategies include engineering, education, and enforcement. Engineering treatments are related to roadway and pedestrian-facility design. These treatments generally provide spatial separation between pedestrians and moving vehicles. Millions of pedestrians are non-fatally injured in road traffic fatalities – some of them are left with permanent disabilities. These incidents cause much suffering and grief as well as economic hardship. While pedestrians are everywhere, especially in urban settings, they are often not seen as a major part of the transportation network but as something apart. Actually they form an integral part of the intermodal system of transportation.

The pathetic condition of the Medical College Junction-Ulloor Junction road in Thiruvananthapuram gives a nightmarish experience for motorists and pedestrians traversing the stretch. The situation turns worse during peak hours when buses, vehicles transporting school and college students, vehicles to Technopark and most importantly ambulances and other vehicles carrying patients to various hospitals vie for road space. Here pedestrians are forced to walk on the carriageway increasing the chances for accidents. This issue of Safe Savari looks into the need for providing a pedestrian foot over bridge across the various roads at Medical College junction with access ramp as per Indian Road Congress (IRC) Guidelines.

Prefeasibility study for Providing Pedestrian Crossing Facilities at Medical College Area, Thiruvananthapuram

Medical College junction is a busy junction situated in Thiruvananthapuram District. It is one of the busiest areas in Thiruvananthapuram due to the frequent movement of ambulances and emergency vehicles. It is a multi-armed uncontrolled intersection. Most of the pedestrians are bystanders, patients or employees of the hospitals. Roads that meet in this junction are Ulloor-Medical College road, Chalakuzhi lane, Pattom - Medical College Road, Kumarapuram Road and Medical College campus road. **Figure-1** shows the location map of the study area.

NATPAC conducted a prefeasibility study for providing a pedestrian foot over bridge across the various roads at Medical College junction with access ramp as per Indian Road Congress (IRC) Guidelines. The methodology adopted for the study consisted of Reconnaissance Survey, secondary data collection from the concerned authorities, assessment of land availability at the project location, development of different foot-over bridge/ramp options and rough cost estimate for the suitable option.



Figure 1: Study Area Map

The existing pedestrian flow pattern and vehicular conflict movement in the Medical College Junction was assessed. It has been observed that the pedestrian flow from Medical College campus to the area opposite to Medical College campus is considerably high as most of the medical shops and commercial shops are located in this area. More than 4000 pedestrians including patients and bystanders are crossing the junction in this direction during the peak hour ie between 7:45AM to 8:45AM. The total width of road measured in the junction varied from 12 - 18 meter which is unsafe for pedestrians to travel in the crisscross traffic movement. Also the footpath opposite to Medical College is occupied by street vendors. A preliminary survey has been conducted to explore the existing scenario such as characteristics of road, footpath, presence of signals and bus stops in the roads that lead to Medical College Junction (**Table-1**).

Sl. No.	Parrticulars		Name of the Road				
			Ulloor Road	Chalakuzhi Road	Murinjapalam Road	Kumarapuram Road	
1.	Carriageway- Width (m)		17.4	8.5	12	8	
2.	Footpath (m)	L	0.8-1.2	1.25	2.15	1.2-2	
		R	2.1	1.15	2.35	1.2-2	
3.	Condition of foot path		Poor, No handrails	Narrow, unauthorized encroach- ments	Very poor, with obstructions	Very poor, with obstruc- tions	
4.	Bus stops	L	2	0	1	1	
		R	1	0	0	0	

The provision of butterfly shaped foot over bridge is the best suited option at Medical College junction to ease the pedestrian movements. This model will decrease the walking distance and attract the pedestrian to make use of it. It is also determined that the provision of dog-legged landing staircase ramp is feasible as it will reduce the land area to be acquired.

The plan showing the pedestrian foot over bridge with the proposed ramp location area is shown in **Figure-2** along with typical cross section of walkway shown in **Figure-3**.



Figure 2: Proposed plan of Pedestrian Foot Over Bridge



Figure 3: Typical Cross Section of Pedestrian Foot Over Bridge

Safe Community Programme at Panchayath Level

The 'Safe Community Programme at Panchayath level has been designed by NATPAC with the intention of adopting the zero-accident policy. This programme aims to encourage local communities like Panchayaths to initiate and productively seek ways to reduce accident risk and increase road safety. Panchayaths need to be equiped for undertaking road safety projects/Programs on their own.

The following Panchayaths were covered during this period:

- 1 . Balaramapuram Panchayath (Thiruvananthapuram District) on 20th August 2016, at Vyapara Bhavan, Balaramapuram.
 - 84 ACT Force volunteers, Panchayath members and Police representatives participated.
- 2 . Bharanikkavu Grama Panchayath (Alappuzha District) on 29th September 2016, at Community Hall, Bharanikkavu.
 - 109 ACT Force volunteers participated.



Class on 'Road Safety' at SCP, Bharanikkavu Grama Panchayath



First Aid Training at SCP, Bharanikkavu Grama Panchayath

Road Safety Youth Leadership Programme (RSYLP)

- □ K Karunakaran Transpark, Akkulam for the volunteers of Thiruvananthapuram based Helping Hands Organization (H,O) on 16th July 2016.
 - 69 volunteers participated.



Shri G. Sivavikram IPS, Deputy Commissioner of Police, Thiruvananthapuram, inaugurating the one day training programme on Road Safety and Youth Leadership at K Karunakaran Transpark, Akkulam



First Aid Training at K Karunakaran Transpark, Akkulam

- □ Govt. Model Higher Secondary School, Varkala in association with the Energy Conservation Society (ECS) for National Service Scheme Volunteers of the Higher Secondary Section on 26th July 2016.
 - 64 students participated.
- □ Govt. Higher Secondary School, Balaramapuram on 7th September 2016.
 - 98 students participated.



Dr. B.G. Sreedevi, Director, NATPAC inaugurating RSYLP at Govt. HSS, Balaramapuram

- □ K.K.M Govt. Higher Secondary School, Ilippakkulam, Alappuzha on 28th September 2016.
 - 259 students participated.

Safe Road to School (SRS)

NATPAC in association with Kerala Road Safety Authority (KRSA) organised one day programme on 'Safe Road to School' (SRS) at selected schools. They are:

Sl. No.	Programme Details	Date
1	Govt. UPS, Koothattukulam, Ernakulam in connection with the inauguration of the School Road Safety Cell (100 students participated)	02.07.2016
2	K Karunakaran Smaraka Town Hall, Thrissur for Junior Red Cross Volunteers & Councillors. (1000 student volunteers and 150 student councillors participated)	21 st - 22 nd July 2016
3	Govt.Model Higher Secondary School, Varkala, jointly organised by NATPAC and Energy Conservation Society for Junior Road Safety Officers. (100 students participated)	26.07.2016
4	Govt. HSS, Prakkulam, Kollam, jointly organized by NATPAC and Energy Conservation Society (95 students participated)	23.08.2016
5	Govt. HSS, Anchalumoodu, Kollam, jointly organized by NATPAC and Energy Conservation Society (100 students participated)	23.08.2016
6	Govt. Higher Secondary School, Balaramapuram (79 students participated)	25.08.2016
7	K.K.M Govt. Higher Secondary School for students of 7 th – 10 th Standards, Ilippakkulam, Alappuzha (100 students participated)	28.09.2016



Class on 'Road Safety' at K Karunakaran Smaraka Town Hall, Thrissur



Class on 'Road Safety' at K.K.M Govt. Higher Secondary School

Road Safety Training for Various Road User Groups

- Training on Driving and Road Safety for Excise Drivers at State Excise Academy and Research Centre, Thrissur on 23rd August 2016.
 - 20 drivers participated.
- ii. Training on Road Safety to Police drivers at Police Training College, Thiruvananthapuram on 31st August 2016.
 - 30 drivers participated.
- iii. Road Safety Awarness Programme to general public at St. Joseph's Church Auditorium, Kidarakkuzhi on 11th September 2016.
 - 76 people participated.

Training Course for Drivers of Vehicles Carrying Dangerous and Hazardous Goods

Five programmes were completed during this period.

SI. No.	Programme Venue	Date	Participants
1	K Karunakaran Transpark, Aakkulam	10 th July 2016	14
2	K Karunakaran Transpark, Aakkulam	14 th August 2016	14
3	K Karunakaran Transpark, Aakkulam	25 th –27 th August 2016 (13 th Batch)	41
4	K Karunakaran Transpark, Aakkulam	27 th August 2016	3
5	K Karunakaran Transpark, Aakkulam	18th September 2016	21

Road accident parameters of Kerala during July to September 2016



Day/Night accidents in Kerala - July to September 2016





Do You Know?

ZEBRA CROSSING

Although the origin of the name is disputed, it is generally attributed to British $M \cdot P \cdot J$ ames Callaghan who, in 1948, visited the country's Transport Research Laboratory which was working on a new idea for safe pedestrian crossings \cdot On being shown a black and white design, Callaghan is said to have remarked that it resembled a zebra \cdot

Crossings were originally marked by beacons and parallel rows of studs. After isolated experiments, the zebra crossing was first used at 1000 sites in the United Kingdom in 1949 in its original form of alternating strips of blue and yellow, and a 1951 measure introduced them into law.

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Making it easy for walkers

Footpaths

Minimum width - 1.80 m Maximum height - 150 mm from road surface

Cycle tracks Minimum width - 1.80 m (To be painted in contrasting tone for better visibility)

Pedestrian refuge islands Minimum width - 1.2 m Along metro corridor - 2.40 m

Zebra crossings width - 4 m







SAFETY TIP

Walk on sidewalks and paths where you can. If there are no sidewalks, walk facing traffic, maintaining a safe distance from vehicles.





Published by Director, NATPAC

Kerala Road Safety Authority

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