

# SAFE SAVARI

## Newsletter on Road Safety

**natpac**

NATIONAL TRANSPORTATION PLANNING AND RESEARCH CENTRE



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*From the desk of NATPAC Director...*



NATPAC is consistently advocating for the safety of public on roads powered by the expertise and experience gained over the years. NATPAC has a wide range of activities and functions that support the state's role in road safety. The need to analyse traffic safety from an ethical perspective has become more urgent due to the recent tendencies. The road traffic accidents are one of the leading causes of death and serious injuries in our state. Consequently there is a grave need for emphasizing on traffic safety and related education. The technological advancement like ITS application can be of much help in accelerating the efforts of realizing the globally accepted mission of *Vision Zero* (Zero deaths and serious injuries). How well the road users are informed and educated is dependent on the quality of road safety education imparted to them. Though the road safety education starts at school, but much desired is left to be done. As a landmark initiative in this course, NATPAC has launched an innovative programme- "*Road Safety Awareness to Higher Secondary Students in Kerala*". This can bring an attitudinal change in the young minds about the road usage and modes of travelling. Apart from this, in order to extend the outreach, NATPAC is anchoring a series of state wide awareness programmes for the general public and children regarding primary trauma care and road safety. Time and again NATPAC does persist on sharing our collective wisdom for adopting the best practices in the world to this noble cause of saving the lives and thereby implementing a sustainable road safety action plan.

### Road Safety Awareness to Higher Secondary Students in Kerala



State level inauguration of 'Road Safety Awareness to Higher Secondary Students in Kerala' by Shri.A.Noushad, Regional Deputy Director, Higher Secondary Education, Kozhikode and view of the participants

Road Safety awareness is important in achieving a safe system and the involvement of Higher Secondary Students is crucial as active contributors to a community. NATPAC launched a new programme – ‘Road Safety Awareness to Higher Secondary Students in Kerala’ with the support of Department of Higher Secondary Education and School authorities.

The State level launching of this programme was done by Shri. A. Noushad, Regional Deputy Director, Higher Secondary Education, Kozhikode at St. Joseph Higher Secondary School, Kozhikode on 7<sup>th</sup> October 2014.

The inaugural session was attended by Fr. K. Devasi, Principal and Shri. C. Janardhanan, Executive Director, KARMA, Kozhikode. 210 students attended the training. The training will equip students to-

- ✦ Critically analyse the behaviours of road users and to plan, carry out and evaluate actions that lead to safer journeys
- ✦ Practice driving in different conditions
- ✦ Develop confidence and safe driving skills as a matter of habit so that they can devote more attention to observe and avoid hazards
- ✦ Critically analyse a variety of simulated situations and transport environments and to suggest strategies to manage these safely

- Road Safety Training to Higher Secondary Students was conducted at Govt. Higher Secondary School, Vilavoorkal, Thiruvananthapuram on 14<sup>th</sup> November 2014. 150 students attended the training.
- Road Safety Training to National Service Scheme (NSS) volunteers was conducted at KPSPM VHSS, East Kallada, Kollam on 22<sup>nd</sup> December 2014. In the afternoon session the volunteers were taken to Chittumala junction for evaluating road safety issues. Road show was also conducted by the volunteers which was flagged off by Sub Inspector of Police, East Kallada. 55 volunteers attended the training.



Road Show by NSS volunteers

## Safe Road to School



Shri.K.K.Sajeer, Circle Inspector,Thrissur East Inaugurating the SRS programme at Chaldeen Syrian Higher Secondary School



A class on 'Road Safety' at Govt.Higher Secondary School, Vilavoorkal



• Training on Road Safety was organised at Chaldean Syrian Higher Secondary School, Thrissur on 28<sup>th</sup> November 2014. Shri. K.K.Sajeev, Circle Inspector, Thrissur East inaugurated the programme. 100 members of the School Road Safety Cell and teachers attended the training.

• Road Safety Training Programme was conducted at LVUPS Venkulam, Varkala on 16<sup>th</sup> October 2014. 250 students attended the training.

• Road Safety Training Programme was conducted at Ansar Public School, Perumpilavu, Thrissur on 26<sup>th</sup> November 2014. Shri.Krishnakumar, Circle Inspector, Kunnankulam inaugurated the programme. Students of 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> Standards and Student Police Cadets attended the training.

• Training on Road Safety was organised at SNV HSS & VHSS, Angadical South, Pathanamthitta for Scout and Guide Students Cadets on 29<sup>th</sup> December 2014.

## Road Safety Youth Leadership Programme

• The Centre organised Road Safety Awareness Programme for National Service Scheme (NSS) volunteers at Sree Guruvayurappan College, Kozhikode on 7<sup>th</sup> October 2014. 200 volunteers attended the training.

• NATPAC in association with Kerala State Youth Welfare Board organised a one day workshop for District Level Officers and Co-ordinators of Kerala State Youth Welfare Board on 9<sup>th</sup> October 2014 at Sasthra Bhavan, Pattom. The programme was inaugurated by Shri. Radhakrishnan Nair, Member Secretary, KSYWB. Keynote address was delivered by Smt. B.G.Sreedevi, Director, NATPAC.

• NATPAC organised Road Safety Training Programme for National Service Scheme (NSS) Students at CMMM College for Advanced Studies, Varkala on 23<sup>rd</sup> December 2014.



*Smt.B.G.Sreedevi, Director, NATPAC; Dr.G.Ravikumar, Scientist-F, NATPAC and Shri.Radhakrishnan Nair, Member Secretary, KSYWB at the inaugural session of workshop*

• The Centre organised Road Safety Training Programme for 1<sup>st</sup> year Engineering students of Royal College of Engineering and Technology, Akkikavu, Thrissur on 27<sup>th</sup> November 2014. 150 students attended the training.

## Road Safety Training for Various Target Groups

i. Training on Road Safety for school children, Govt. Higher Secondary School, Vilavoorkal on 6<sup>th</sup> October 2014.

ii. Training on Road Safety, Staff Training Centre, KSRTC, Attakulangara on 28<sup>th</sup> October 2014 as part of Refresher Training Programme for KSRTC Vehicle Inspectors and Drivers.

iii. Training on Road Safety, Police Training College, Thiruvananthapuram on 29<sup>th</sup> and 30<sup>th</sup> October 2014.

iv. Road Safety Awareness Programme for members of 'Unarvu', a forum for senior citizens sponsored by Govt. of Kerala, at Samskrithi Bhavan on 15<sup>th</sup> November 2014. 250 senior citizens attended the session.

## Exhibitions

- i. NATPAC secured 2<sup>nd</sup> position in the General Category of the Science and Technology Expo conducted in connection with Swasraya Bharat – 2014, organised by Swadeshi Science Movement –Kerala at College of Agriculture, Padannakkad, Kasargod, 14<sup>th</sup>- 19<sup>th</sup> October 2014.
- ii. Road Safety Exhibition and audio -visual programmes at Sree Narayana Central School, Nedungolam, Kollam, 21<sup>st</sup>– 22<sup>nd</sup> November 2014.



## Analysis of Road Accident Causative Factors

### LPG Bullet Accident at Kundannoor

On 23<sup>rd</sup> October 2014 an accident between a LPG Bullet and a Nano Car occurred at Kundannoor in Ernakulam District at 08.15 pm. The driver of the LPG bullet was killed in the accident. This happened about 200 metres east of Kundannoor Junction on NH – 49. As per Police FIR, the accident occurred when the tanker driver applied the brakes and swerved the vehicle to avoid ramming into a Tata Nano car parked on the road side, which had started entering the road in reverse gear. The heavy vehicles' cabin (prime mover) crashed into an electric post. The driver of LPG bullet succumbed to injuries.

Officials from NATPAC visited the accident spot on 27<sup>th</sup> October 2014. The reckless and negligent action of the driver of the Nano car caused the accident. The LPG bullet carrying 18 tonnes of LPG was heading to Paripally in Kollam from IOC plant in Palluruthy.

If the driver of the car had ensured that the road is clear before reversing, the accident could have been averted. It is also not clear whether the head lights of the car were on.

Zig-zag skid marks of the LPG bullet were seen for about 25 feet length at the spot indicating the excessive speed of the LPG bullet. According to locals, the traffic is very lean in this stretch after 08.00 pm. It is conspicuous that the road width was not sufficient in this stretch. Paved shoulders should be provided with specific markings. Widening of road at this spot is mandatory as there is frequent movement of vehicles carrying hazardous materials. This being a shopping area, off road parking facilities should be provided. Head-in parking at on-street parking spaces should be prohibited in these areas. Designated parking places should also be marked and informatory parking signs should be mounted on the kerb side.

An old structure of water tank can be seen near the accident site. Fixed objects should be removed or relocated to a place where they are less likely to be hit as it obstructs the direct vision of drivers.

## Mini Lorry Accident at Cherthala

An accident between a Mini Lorry and Scorpio Car took place at NH-47 (Alappuzha – Ernakulam) in front of Government Polytechnic, Cherthala, Alappuzha District on 2<sup>nd</sup> October 2014 at 04.20 am. Three people travelling in the car were killed and five people in the car got seriously injured. Both vehicles were completely damaged.

The spot study revealed that the Scorpio Car was coming from Alappuzha towards Ernakulam. When the car reached Cherthala Government Polytechnic, it collided against the loaded mini lorry coming in the opposite direction.

As per the Police FIR the rash and negligent driving of mini lorry driver was the reason for this fatal incident. One passenger in

the car was killed on the spot and two died in hospital the same day. Five people including the driver of the car were seriously injured. The driver of mini lorry also sustained injuries. Since it was early morning the traffic volume was less and it is inferred that both the vehicle were speeding at the time of the crash.

NATPAC implied on providing sufficient street lights in this area. Deep and muddy pot holes were seen on both sides of the road. It is recommended to level the road shoulders on both sides. Unauthorised parking especially during night should be prohibited in these areas for better visibility.

## Motorcycle Accident at Aroor

The reckless driving of a motorcyclist claimed two lives in an accident at Aroor in Alappuzha District on the 24<sup>th</sup> of October 2014 at 07:30 pm.

A motorcyclist with a pillion rider hit directly on the rear side of the bus parked along the shoulder in Aroor-Cherthala road. The two riders on the motor cycle died on the spot. The motorcycle was completely damaged in the incident while the bus suffered minor damages at the rear end. According to FIR the private bus was parked on the shoulder without obstructing the movement of vehicles on the road when it was hit by a motorcycle proceeding towards Cherthala side. As per investigation conducted by the NATPAC team, it is revealed that there is rashness and negligence on the

part of the deceased motorcycle driver as the private bus was in stationary position and was parked on the extreme edge of the road shoulder.

The location is a straight road having direct visibility of about 300 meters towards north and south so there is nothing unusual to be mentioned about the accident spot. It was learnt from secondary sources that both the motorcyclists were drunk and was returning after attending a pre marriage function of their relative.

NATPAC suggested remedial measures like, Enhancing Police enforcement for crackdown on drunken driving. Parking of vehicles on the foot path should be prohibited for safety of other road users.

## Bus Accident at Akkulam Bridge

An accident between an Engineering College Bus and Scooter took place at NH-47 Bypass near Akkulam Bridge in Thiruvananthapuram District on 31<sup>st</sup> December 2014 at 05.25 pm. Two people riding on the scooter were killed.

As per FIR of Police, the Marian Engineering College bus hit the rear end

of a scooter while trying to overtake it. As a result the scooter hit another two wheeler ahead and fell to its right throwing its two passengers on the road. The passengers lying on the road were run over by the same bus resulting in their death.

Officials from NATPAC visited the accident spot on 2<sup>nd</sup> January 2015. The accident



location is on NH-47 bypass which is from Kazhakoottam to Kovalam. The cross section of the road where the accident occurred is a two lane road with paved shoulders on both sides. But at the accident spot the shoulders are entirely covered with vegetation. Pavement surface is of good riding quality.

**Main** flaw in the design of this road stretch is the uneven roadway width influencing the speed of the drivers. The road is quite wide at Kazhakoottam side of the stretch which reduces abruptly when it approaches the Akkulam bridge. Traffic sign showing “GO SLOW” is placed just before the bridge which does not serve the purpose. The sign should be

placed at least 100 m ahead of the bridge where the lanes are wider giving enough time and space for the drivers to slow down. Lane markings have faded away and are less visible. The thick vegetation on left side of the accident spot poses great threat to the pedestrians forcing them to use the roadway.

The team inspected the scooter which was taken into the police custody at traffic station, Pattom. It was apparent that the information given by the locals were not true. It was the scooter which had taken hit on the rear left indicating that the crash had taken place while the scooter was trying to overtake the bus. This assertion could be proved only after detailed inspection of the college bus. The rash and negligence of the scooter driver was found as the root cause of this accident. However the thick vegetation covering the paved shoulder and the sudden reduction in the width of the roadway assisted the root cause.

NATPAC suggested that ‘GO SLOW’ sign should be provided well ahead of the bridge where the road is wider. Proper road illumination is to be ensured through street lighting and reflective pavement markings. Solar flashing amber light systems should be installed at this accident prone location. Periodic cutting of the vegetation will prevent it from growing on to the roadway.



*Thick Vegetation on the road side at the accident location*



*Condition of the scooter after accident*

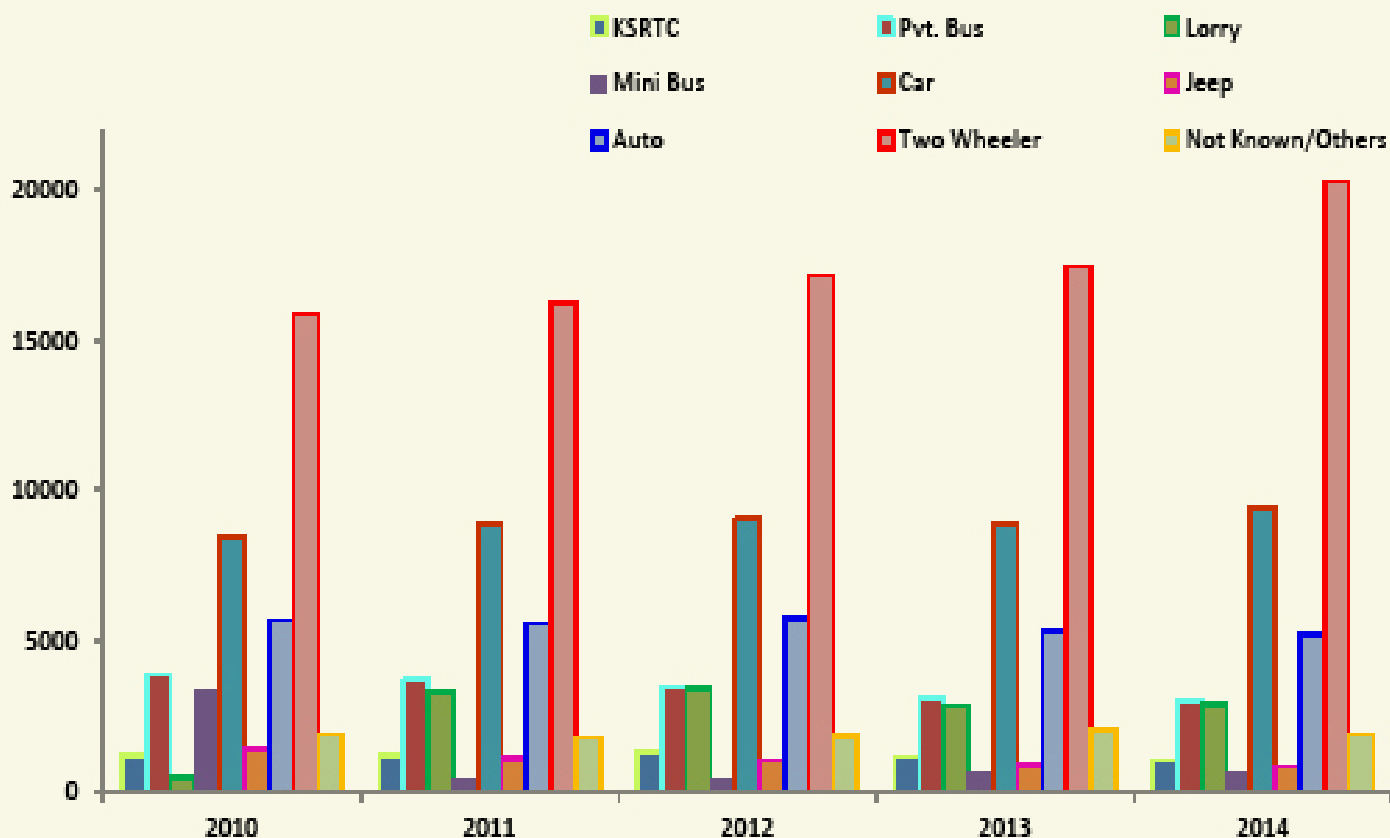
Road accident details in the districts of Kerala in 2014

DISTRICTS	No. of ACCIDENTS				TYPE OF ROAD			CAUSE OF ACCIDENT			DURING		TYPE OF VEHICLES INVOLVED									
	Total Accidents Reported	Dist	City & Town	Infra	Highway	Urban	Rural	Drinking	Over	By	Night	KMTC	Passenger	Truck	Bus	Motor Cycle	Auto Rickshaw	Two Wheeler	Others	Total		
Thiruvananthapuram	4702	504	3939	1343	974	283	3445	4317	80	305	3422	1280	240	110	139	122	1153	54	676	3677	77	75
Kollam	2865	378	2487	788	1110	184	1671	2837	0	138	2167	798	103	172	153	25	720	42	483	1175	129	13
Pathanamthitta	1496	131	1125	486	8	568	928	1436	0	70	1178	318	51	71	100	38	357	31	214	759	123	8
Alappuzha	2865	369	2305	1025	1175	503	1287	2889	0	65	2851	913	66	171	243	89	783	13	384	1861	149	14
Kottayam	2529	241	1944	869	244	551	1734	1972	257	300	1936	593	59	214	171	80	691	64	362	832	47	19
Ernakulam	5687	465	3914	2240	1294	1046	3347	5591	22	74	4339	1348	184	537	663	105	1704	71	670	4705	208	29
Idukki	985	84	664	585	171	363	452	955	0	30	831	154	49	54	49	17	198	121	282	236	43	2
Thrissur	4114	415	2913	1513	991	952	2172	4107	1	7	2978	1137	75	418	327	15	1180	49	636	2804	262	28
Palakkad	2152	337	1280	1236	417	665	1070	2088	1	53	1608	544	30	210	206	57	421	78	355	723	186	19
Malappuram	2719	354	2604	1384	656	698	1365	2689	2	18	1948	771	45	279	321	62	615	82	419	771	181	14
Kozhikode	2743	359	1905	933	1114	475	1153	2713	15	14	1995	747	58	392	236	8	654	87	315	1966	203	19
Wayanad	609	66	401	327	187	123	380	682	1	6	447	162	27	41	23	1	155	43	92	193	30	5
Kannur	1835	192	953	1639	423	443	969	1831	4	10	1430	404	43	282	155	4	579	58	368	1181	126	10
Kasarode	818	97	505	445	382	165	351	818	0	0	606	213	29	55	84	11	219	33	129	220	30	8
STATE TOTAL	36318	3964	26139	14613	9058	7016	20244	34845	383	1090	26936	9382	1059	2986	2869	614	9408	825	5225	20293	1633	263

Districts with maximum 3 positions in accident characteristics

First position Second position Third position

Source:SCRB



**Trend of Accidents Involving Various Types of Vehicles in Kerala (2010-'14)**

Source:SCRB



## Obey Traffic Rules



**Let us pledge to make road SAFER!**



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Kerala Road Safety Authority



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**Dr.B.G.Sreedevi**  
Director  
NATPAC

**National Transportation Planning and Research Centre**

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Sasthra Bhavan, Pattom -695004, Thiruvananthapuram

Phone:0471-2548200, Director: 2548300, Registrar: 2548310,Fax: 0471-2543677

E-mail: [contactus.natpac@kerala.gov.in](mailto:contactus.natpac@kerala.gov.in), Web: [www.natpac.kerala.gov.in](http://www.natpac.kerala.gov.in)

**NATPAC CAMPUS**  
K.KARUNAKARAN TRANSPARK,  
Aakulam, Thuruvikkal P.O,  
Thiruvananthapuram.  
Pincode: 695031  
PHONE: 0471 - 2551282 / 2554467 /  
2553701

*Edited by*  
**D.Robinson**  
Scientist-F  
NATPAC

**REGIONAL OFFICE**  
(KOZHIKODE)  
No.19/1429,Chand Nivas,  
Kottakkal Road,  
Bajana Koil Junction,  
Chalappuram P.O, Kozhikode.  
Pincode: 673002