

Director's Message



Greetings from NATPAC...

The major activities of NATPAC during the period January – March 2024 are presented in this Newsletter. During the period under report 2 research papers in scientific journals and 1 conference proceeding have been published and 6 research papers were presented in national/international seminars by the Scientists of NATPAC.

NATPAC in association with LSGD - Kerala State Rural Roads Development Agency (KSRRDA) conducted One-Day Workshop on Full Depth Reclamation Technology at Thiruvananthapuram, Ernakulam, and Kozhikode where representatives from various government departments and construction sector participated. The workshop was held at - Thiruvananthapuram on 8th January 2024 at Parijatham Auditorium, IMG, Thiruvananthapuram; at Ernakulam on 10th January 2024 at GCDA Conference Hall, Jawaharlal Nehru International Stadium, Ernakulam and at Calicut on 12th January 2024 at Bhaskara Hall, National Institute of Technology (NIT), Calicut.

As part of observance of Road Safety Month 2024, NATPAC in association with various academic institutions organized 22 road safety training programmes across the 14 districts in Kerala covering the road users like Youth, Driving School Instructors, Ambulance Drivers, Educational Institution Bus Drivers, etc.

In the month of March 2024, the Civil Engineering Division of the School of Engineering of the Cochin University of Science and Technology (CUSAT) and KSCSTE-National Transportation Planning and Research Centre (NATPAC) signed a Memorandum of Understanding to collaborate on research in various sectors.

As the Director of NATPAC, I thank all the scientific, technical and administrative staff of NATPAC for their wholehearted cooperation for taking NATPAC to greater heights.

With Best Wishes

Prof.(Dr.) Samson Mathew

One-day Workshop on Full Depth Reclamation Technology

Kerala State Council for Science, Technology and Environment (KSCSTE) - National Transportation Planning and Research Centre (NATPAC) in association with LSGD - Kerala State Rural Roads Development Agency (KSRRDA) conducted One-Day Workshop on Full Depth Reclamation Technology at Thiruvananthapuram, Ernakulam, and Kozhikode where representatives from various government departments and construction sector participated. The technical sessions were handled by experts from IITs/NITs, engineers from various government departments and technology providers such as Zydex, RoadstaB, AVS Inno Infra, Vishwa Samudra Engineering and Avijeet Agencies.

The workshop at Thiruvananthapuram was held on 8th January 2024 at Parijatham Auditorium, IMG, Thiruvananthapuram; at Ernakulam on 10th January 2024 at GCDA Conference Hall, Jawaharlal Nehru International Stadium, Ernakulam and at Calicut on 12th January 2024 at Bhaskara Hall, National Institute of Technology (NIT), Calicut.



Prof. Dr. K P Sudheer, Ex Officio Principal Secretary, Science & Technology Department and Executive Vice President, KSCSTE inaugurating the FDR workshop at Thiruvananthapuram



Participants of the FDR workshop at Ernakulam



Participants of the FDR workshop at Calicut

Observance of National Road Safety Month 2024

As part of observance of Road Safety Month 2024, NATPAC in association with various academic institutions organized 22 road safety training programmes across the 14 districts in Kerala covering the road users like Youth, Driving School Instructors, Ambulance

Drivers, Educational Institution Bus Drivers, etc. Various snapshots of road safety programmes conducted across the state is shown in the figure below. The detailed schedule of the training programmes is represented in the Table.



Road Safety Month 2024 - Training Programmes by KSCSTE-NATPAC

Sl. No	District	Target Group	Training Programme	No. of Participants	Venue	Date
1	Thrissur	Youth	One-day training programme for Driving School Instructors	53	Sahrdaya College of Engineering and Technology, Thrissur	31/01/2024
		Driving School Instructors	One-day training programme on Road Safety and Youth Leadership	50		01/02/2024
2	Ernakulam	Youth	One-day training programme on Road Safety and Youth Leadership	40	KMEA Engineering College, Edathala	01/02/2024
		Ambulance Drivers	One-day training programme for Ambulance Drivers	33		03/02/2024

Sl. No	District	Target Group	Training Programme	No. of Participants	Venue	Date
3	Kozhikode	Youth	One-day training programme on Road Safety and Youth Leadership	45	KSCSTE - Kerala School of Mathematics (KSoM), Kunnamangalam, Kozhikode	02/02/2024
4	Kannur	Youth	One-day Training Programme on Road Safety and Youth Leadership	60	St. Thomas College of Engineering & Technology, Mattanur, Kannur.	02/02/2024
		Educational Institution Bus Drivers	One-day Training Programme for Educational Institution Bus Drivers	43		03/02/2024
5	Wayanad	NSS Volunteers	Road Safety Youth Leadership Programme for NSS Volunteers	42	WMO Arts and Science College, Muttill, Wayanad	03/02/2024
6	Malappuram	Youth	One-day training programme on Road Safety and Youth Leadership	38	M E S Ponnani College Ponnani, Malappuram	07/02/2024
		Educational Institution Bus Drivers	One-day Training Programme for Educational Institution Bus Drivers	43		08/02/2024
7	Trivandrum	Youth	One-day training programme on Road Safety and Youth Leadership	63	College of Engineering Trivandrum	07/02/2024
		Youth	One-day training programme on Road Safety and Youth Leadership	45	Mar Baselios College of Engineering and Technology (Autonomous), Thiruvananthapuram	08/02/2024
		Educational Institution Bus Drivers	One-day Training Programme for Educational Institution Bus Drivers	24		14/02/2024
8	Kollam	Youth	One-day training programme on Road Safety and Youth Leadership	150	Fatima Mata National College (FMNC), Kollam	12/02/2024
9	Kottayam	Youth	Research Resilience and Advocacy on Road Safety	80	Rajiv Gandhi Institute of Technology, Kottayam	13/02/2024
10	Alappuzha	Youth	One-day training programme on Road Safety and Youth Leadership	89	Sanatana Dharma College, Alappuzha	13/02/2024
11	Idukki	Youth	One-day training programme on Road Safety and Youth Leadership	59	College of Engineering, Munnar	13/02/2024
12	Kasaragod	Ambulance Drivers	One-day training programme for Ambulance Drivers	40	Nehru Arts and Science College-Kanhangad, Kasaragod	13/02/2024
		Youth	One-day training programme on Road Safety and Youth Leadership	100		14/02/2024

Sl. No	District	Target Group	Training Programme	No. of Participants	Venue	Date
13	Palakkad	Youth	One-day training programme for Road Safety and Youth Leadership	50	NSS College of Engineering, Palakkad	13/02/2024
		Driving School Instructors	One-day training programme for Driving School Instructors	50		14/02/2024
14	Pathanamthitta	Youth	One-day training programme on Road Safety and Youth Leadership	75	Musalair College of Engineering & Technology, Pathanamthitta	14/02/2024

Training Course for Drivers of Vehicles Carrying Dangerous and Hazardous Goods

Government of Kerala accorded sanction to KSCSTE-NATPAC for conducting 'Training Course for Drivers of Vehicles Carrying Dangerous and Hazardous Goods'. A certificate for the same is issued to participants on the completion of training and this certificate is valid for 3

years. The training intends to ensure employee's safety, reduce incidents and crashes, increase employee's skills, ensure environmental protection, preclude penalties and reduce operating costs.

Sl.No	Hazardous Training Program	Date	No. of Participants
1	51 st	20.03.2024 – 22.03.2024	32



Road Safety Training for Various Target Groups

SLNo	Program Details	Date	Venue
1	Traffic enforcement 7day training with road patrol workshop	February 2024	Kerala Police Academy, Thrissur
2	Road Safety Training Programme for Youth	13.02.2024	SD college Alappuzha



Traffic enforcement 7 day training with road patrol workshop at Kerala Police Academy, Thrissur

Exhibitions

1. Road Safety exhibition at the Global Science Festival Kerala (GSFK 2024), Life Science Park, Thonnakkal, Thiruvananthapuram, 15.01.2024 – 15.02.2024



2. Road Safety exhibition in connection with 36th Kerala Science Congress, Kasaragod Government College, Vidyanagar, Kasaragod, 08.02.2024 -11.02.2024.



3. Road Safety exhibition at the Educational Expo at P T M Group of Educational Institutions, Balaramapuram, 22.02.2024 – 23.02.2024.

Training/Invited Expert Talk

- a. Laboratory demonstration for students of St.Thomas institute for Science and Technology, Trivandrum, at KSCSTE-NATPAC, Aakkulam, 22nd February 2024. 48 students participated.
- b. Five-day on job training and field practice on total station and DGPS, for ITI surveyor students from Attukal ITI, 11th – 15th March 2024. 25 students attended.
- c. Demonstration cum training of ARES commander 2024 for scientists, technical staff and project fellows, 18th March 2024.
- d. Workshop on Bitumen Rheology by Dr Sumit Singh, Anton Paar for Scientists, Technical staff and Project Fellows, 21st March 2024.
- e. *TransTech Talk Series*

KSCSTE-NATPAC has initiated a technical talk series entitled “TransTech Talk Series” focussing on various aspects of Transportation sector.

The twelfth talk in the series was delivered online by Prof. Krishna R Reddy, Professor of Civil and Environmental Engineering, University of Illinois Chicago (UIC), USA on the topic “Integrating Sustainability and Resilience in Transportation Engineering: Challenges, Frameworks and Applications” on 12th January 2024.

The thirteenth talk in the series was delivered online by Prof. Ashish Bhaskar, Professor of Civil and Environmental Engineering at the Queensland University of Technology, Brisbane, Australia on the topic “Real-Time Simulation of Large Urban Networks: Leveraging Big Transport Data” on 9th February 2024.

The fourteenth talk in the series was delivered online by Er.Suvendu Seth, Transportation Consultant on the topic “Improving Road Safety on Indian Roads” on 15th March 2024.

TransPedia Research Talk Series

TransPedia is a distinctive endeavour from NATPAC, envisioned to promote research for shared benefits, by disseminating knowledge on diverse topics from cutting-edge technologies to sustainable solutions. This also brings out a platform for young researchers across the globe to connect and interact to better shape the future of research and development in transportation.

The sixth talk in the series was delivered online on the topic “Proactive Road Safety Assessment of Intersections through Microsimulation Approach” on 24th January 2023 by Dr. Madhumita Paul, Assistant Professor, IIT Kharagpur.

The seventh talk in the series was delivered online on the topic “Microsurfacing: A Sustainable Preventive Maintenance Treatment for Highways” on 28th February 2024 by Dr. Nishant Bhargava, Assistant Professor, Department of Civil Engineering, Birla Institute of Technology and Science (BITS) Pilani, Pilani Campus.

The eighth talk in the series was delivered online on the topic “Transportation-Derived Quality of Life, Equity, and Safety” on 27th March 2024 by Dr. Gajanand Sharma, Assistant Professor, Ranbir and Chitra Gupta School of Infrastructure Design and Management (RCGSIDM), IIT Kharagpur.

Participation in Workshops, Seminars/Conferences and other Training Programmes

Name of Programme	Organised by	Date (s)	Venue	Participants
Seminars/Conferences				
Smarter Fleet Management: Real-Time Route Optimization and Alerts with Kinetica	Kinetica and Geospatial World			Dr.Anila Cyril
RAID 2024	NIT, Calicut	12.02.2024 -13.02.2024	NIT, Calicut	Shaheem S
National Conference on Soils and Foundation (SAF-2024)	LBS Institute of Technology for Women, Poojappura	15.02.2024 & 17.02.2024		Dr Salini U
RICS India - Built environment in the new era- vision of Kerala Face to Face Event		01.03.2024	Hyat Regency, Thiruvananthapuram	V S Sanjay Kumar, Dr. Sunitha Vijayan
Stakeholders Meet on “Collaborative Assessment of Practical Issues in Transportation” (CAPIT)	Organised by Transportation Engineering Research Centre, College of Engineering Trivandrum	02.03.2024	College of Engineering Trivandrum	Dr. Samson Mathew, V S Sanjay Kumar, Arun Chandran, R. Chandra prathap, Dr Salini U
Training Programmes				
Hands-on training on “Statistical Techniques in Transportation Engineering”	CET	31.01.2024 – 02.02.2024	CET	Dr.Salini U
Workshops				
“GIS Insights: Mapping Tomorrow with Open-Source Spatial Solution”	ICFOSS, Thiruvananthapuram	18.01.2024		M S Saran
1st User Workshop of TUTEM: Technologies for Urban Transit to Enhance Mobility and Safe Accessibility	IIT Bombay, BITS Pilani, Hyderabad Campus, IIT Kharagpur and Location Mind funded by Asian Development Bank	01.03.2024	Metro Rail Bhavan, Begumpet, Hyderabad	Dr. Samson Mathew
Webinars				
Geoenvironmental Engineering webinar		18.01.2024 25.01.2024 01.02.2024 08.02.2024		Dr. Salini U
Zero Emission Buses	UTTP Asia-Pacific together with UTP India and UITP Australia & New Zealand	01.02.2024		Dr.Sanjai R J

Launching of Indian National Group of fib (ING- fib)	Indian Association of Structural Engineers	07.02.2024		Dr. Himasree P R
Spatial Analytics in ArcGIS	ESRI India	21.02.2024		M S Saran
ArcGIS Geostatistical Analyst	ESRI India	28.02.2024		M S Saran
Geospatial Artificial Intelligence (GeoAI)	ESRI Public safety Team	06.03.2024		Dr.Anila Cyril
How to develop a network -centric security approach to defend against threats	CISCO	19.03.2024		Dr.Sanjai R J
GIS Basics	Esri Training	18.03.2024		Dr.Anila Cyril

Publications and Presentations

Papers Published in Referred Journals

- **P R Himasree**, Chaaruchandra Korde, Roger P West, N Ganesan. (2024). State of the art report of bamboo reinforced concrete structural elements. *Magazine of Concrete Research*, Vol. 76, No. 2, pp. 55-68.
- Ashwini Govekar, Lekhaz Devulapalli, Sunil Dighe, Saravanan Kothandaram, **Goutham Sarang** and Sonal Sunil Gupta. (2024). Assessment of microbial degradation of various types of bitumen using FTIR. *International*

Journal of Pavement Engineering, 25:1, 2290658. <https://doi.org/10.1080/10298436.2023.2290658>.

Conference Proceedings

- **Shaheem S**, Radhakrishnan N, **Mathew S**. (2024). Mode Choice Modelling of Different Categories of Work Trips in Thiruvananthapuram City. *Proceedings of SECON'23. Lecture Notes in Civil Engineering*, 381, pp. 251-269, Springer, Cham. https://doi.org/10.1007/978-3-031-39663-2_20.

Publications/Presentation of Papers in Seminars/Workshops

Sl No.	Author(s)	Paper Details	Date
1	P R Himasree , Athira Raj, Chaaruchandra Korde, Sarif N, Sreedevi Lekshmi	"Synthesis, characterization and durability studies of hybrid fiber reinforced high performance mortar". International Conference on Sustainable Materials for Engineering Applications (ICSMEA 2024), IIT Madras. (Published in proceedings)	01.02.2024 – 03.02.2024
2	Shaheem S , Praveen P S , Adurthi N M, Abhiram M P	"A study on identifying traffic improvement measures at a median opening on NH 66 in Thiruvananthapuram city". 36 th Kerala Science Congress, Kasaragod Government College, Vidyannagar, Kasaragod.	08.02.2024 – 11.02.2024
3	Praveen P S , Ashik K A , Leander G, Malavika R N, Nauzzin D, Shivani P S	"A Case Study on Forced Gap Behaviour at Unsignalised Intersections in Thiruvananthapuram City". 36 th Kerala Science Congress, Kasaragod Government College, Vidyannagar, Kasaragod.	08.02.2024 – 11.02.2024
4	Rameesha T V , Veena P Nair	"Structural behaviour of CFST columns under corrosion". 36 th Kerala Science Congress, Kasaragod Government College, Vidyannagar, Kasaragod.	08.02.2024 – 11.02.2024
5	Ashik K Azad , Shijith P P , Ann Lilly Thomas	Poster titled "Performance Comparison of Low Volume Roads Constructed Using New Technology and Conventional Method". 36 th Kerala Science Congress, Kasaragod Government College, Vidyannagar, Kasaragod.	08.02.2024 – 11.02.2024
6	Sajeeha S Shaheem S	"Comparison of Trip Generation and Parking Rates in Major Cities of Kerala". Recent Advances in Infrastructure Development, NIT Calicut.	12.02.2024 – 13.02.2024

Invited Talks/Media Interactions

Invited Talk

Sl. No.	Name& designation of staff	Topic/Particulars	Event/Venue	Date
1	Prof.(Dr.) Samson Mathew, Director	<i>Guidelines for the Design and Construction of Pavements using Natural Geotextiles</i>	Faculty Development Programme on “Recent Advances in Transportation Geotechnics (ReATraG’24)”, College of Engineering Trivandrum	16.01.2024
2		<i>Sustainable Transportation</i>	Techsynod’24, organized by Mohandas College of Engineering and Technology, Trivandrum	25.01.2024
3		<i>Environmental Concerns of Pampa river</i>	Pampa convention	06.02.2024
4		<i>Keynote Address</i>	World engineering Day Celebrations, organised by the Institution of Engineers (India) Kerala State Centre and Marian Engineering College at Marian Engineering college, Tvpm.	04.03.2024
5		<i>Engineering Solutions for a Sustainable World</i>		
6		<i>Novelty in Science, Engineering and Management</i>	Inaugural speech, International Conference, Mahaguru Institute of Technology, Kayamkulam	22.03.2024
7	Shaheem S, Principal Scientist	Co-chaired a session	Recent Advances in Infrastructure Development (RAID) 2024, NIT Calicut	13.02.2024
8	V S Sanjay Kumar, Principal Scientist	<i>Role of Teachers in Ensuring a Safe Road System</i>	Road Safety Training for Teachers - INSIGHTS , organised by Sree Chithira Tirunal College of Engineering at Govt. Pre-Primary Training Institute, Manacaud	19.02.2024
9		<i>Forensic Investigation of Crashes & Data Management & Data Mining Framework</i>	Training Program on Road Crash Data Analysis and Investigation, Sponsored by the Ministry of Road Transport and Highways (Transport Section), Govt. of India, New Delhi, Engineering Staff College of India (ESCI) at Hyderabad	21.02.2024 (FN)
10		<i>Social Cost of Road Crashes and Injuries, Crash Data Collection & Legal Aspects of Crash Investigation</i>		21.02.2024 (AN)
11		<i>EDR data collections - Modelling and Simulation of Crashes</i>		22.02.2024 (FN)
12		<i>Chief guest and Keynote Lecture at the opening ceremony</i>	Observation of 53 rd National Safety Week organised by Thiruvananthapuram International Airport, Thiruvananthapuram International Airport	04.03.2024
13		<i>Role of Teachers in Ensuring a Safe Road System</i>	Road Safety Training for Teachers - INSIGHTS , organised by Sree Chithira Tirunal College of Engineering at Govt. Pre-Primary Training Institute, Manacaud	16.03.2024
14	Jegan Bharath Kumar A, Scientist	<i>Emerging sustainable Pavement Technologies and Carbon Foot print</i>	Engineers at Highway Research Station (HRS), Chennai	08.02.2024
15	Chandra Prathap R, Scientist	<i>Reclaimed Asphalt Pavement Technologies</i>	Highway Research Station, Chennai (Training TST-07) for PWD engineers	08.02.2024

16	Dr.Salini U, Scientist	<i>Full Depth Reclamation – A Sustainable Pavement Reconstruction Technology</i>	Through online for LSGD AE association	14.01.2024
17		<i>Practical Considerations of Subgrade</i>	Online FDP on Recent Advances in Transportation Geotechnics (ReATraG24) at CET	20.01.2024
18		<i>Full Depth Reclamation</i>	HRS Training TST-07 ‘Green Highways’ (Batch-I), Chennai	08.02.2024
19		<i>Co-Chaired the Plenary Session</i>	National Conference on Soils and Foundations SAF-2024, organised by IGS TVM Chapter and LBSITW	15.02.2024
20	Dr. Himasree P R, Junior Scientist	Sesssion Chair	I st Indian Conference on Disaster Resilient Infrastructure (I-DRI 2024), NIT Puducherry	07.03.2024 – 08.03.2024
21	Dr. Anila Cyril, Junior Scientist	“Rack & Crack”	Idea Pitching Competition conducted by Christ College of Engineering, Crowne Plaza, Ernakulam	09.03.2024
22		Industry advisory panel	KIT’s College of Engineering (Autonomous) Kolhapur (Online)	13.03.2024
23	Dr.Sunitha Vijayan, Junior Scientist	<i>Research Methodology for Social Science: An Empirical and Practical Approach</i>	VTM NSS College, Dhanuvachapuram	09.03.2024
24		<i>Agriculture and Environment Nexus: Exploring the Interlinkages between Agriculture Risk and Production in Kerala</i>	Department of Economics, NSS College Cherthala	27.03.2024

Media Interaction

Sl. No.	Name& designation of staff	Topic/Particulars	Media /Event	Date
1	Prof.(Dr.) Samson Mathew, Director	കോഴിക്കോട് ജില്ലയിൽ ശ്രദ്ധിക്കണം ഈ 32 സ്ഥലങ്ങൾ	AIR Kozhikode	10.01.2024
2		<i>Share Auto in Kochi - scope and challenges</i>	AIR Kochi FM	14.01.2024
3		കെ.എസ്.ആർ.ടി.സി നേതൃമാറ്റം ഗുണം ചെയ്യുമോ?	Samakalikam, Dooradarsan	23.01.2024

Other News

- NATPAC organised New Year Celebration on 1st January 2024. In connection with the new year celebrations talk on ‘Bharanabhasha – Malayalam’ was delivered by Dr. M. G. Sasibhooshan.



- Republic Day Celebration at NATPAC



- NATPAC observed Martyrs' Day on 30th January 2024.
- Post Graduate Students of Govt.RIT, Kottayam interacted with Scientists of NATPAC on 6th February 2024.



- The Civil Engineering Division at the School of Engineering of the Cochin University of Science and Technology (CUSAT) and the KSCSTE-National Transportation Planning and Research Centre (NATPAC) signed a memorandum of understanding on 15th March 2024 to collaborate on research in various sectors.



NATPAC IN NEWS...

NATPAC report on Thrikkakara road development to be handed over soon

The Hindu
01-03-2024

Survey to shed light on the need to build new stretches and structures like flyovers and underpasses to lessen snarls at intersections; transport master plan for the region keeping in mind the needs of IT professionals who work at Infopark proposed

The Hindu Bureau
KOCHI

Having conducted a survey and collated feedback from motorists and residents of a dozen local bodies in and around Thrikkakara on the need to develop roads in the region, the National Transportation Planning and Research Centre (NATPAC) would hand over a report on it to the Infopark authorities in a month, informed sources said.

This comes in the wake of the Thrikkakara Development Forum (TDF) and IT professionals demanding development of wider access roads to Infopark, and also steps to decongest Collectorate Junction and Seaport-Airport Road.

"The survey is in its last leg, following which ridership details will be collated. This



Not a smooth ride: Most roads that lead to Infopark are very narrow, creating traffic snarls. FILE PHOTO

would shed light on the need to develop existing roads to build new roads and structures like flyovers and under-

passes to lessen snarls at intersections. A transport master plan for the region can be developed based on the out-

come of the survey report. It could well be a hub-and-spoke model around Infopark since many more IT professionals are set to work/settle in the area," sources said.

There is also a need for direct eastward and westward connectivity from Infopark. This would in turn lessen the strain on the congested Seaport-Airport Road. There is an urgent need to develop the road that was mooted a decade ago, linking Chakkarakappambu on the NH bypass with Seaport-Airport Road.

A flyover or underpass would be needed at either end to streamline traffic flow.

'Half-baked steps'

On its part, TDF too is readying to step up campaign demanding steps to decongest the IT hub. "The government's proposal to widen Sea-

port-Airport Road is a welcome step. Government agencies must desist from half-baked steps like limiting works to extending the width of the tarred portion at Collectorate Junction. A comprehensive project is needed in this regard," said M.S. Anilkumar, general convener, TDF.

The forum had launched a campaign to prevent the 'IT hub' becoming an accident hub' since fatal and other road accidents were taking place owing to narrow and ill-maintained roads.

The forum has been creating awareness among stakeholders about the chaos that might prevail when roads are barricaded for the metro's 11.20-km Kakkanad extension. It has also been spearheading efforts to decongest Collectorate Junction by acting in tandem with NATPAC.

Cusat, NATPAC join hands for research

The Hindu Bureau
KOCHI

The Civil Engineering division at the School of Engineering of the Cochin University of Science and Technology (Cusat) and the National Transportation Planning and Research Centre (NATPAC) have signed a memorandum of understanding to collaborate on research in various sectors.

The two institutions will join hands to carry out research in the areas of water, air, highway, engineering, traffic and

transportation planning, road safety, transport economics, and management, according to a release.

Topics

The agreement will help in undertaking consultancy projects as per requirements across various sectors.

The research topics include economic feasibility, public transport studies, social and economic impact analysis, transport energy and pollution, water transport, and innovative transport system applications.

അപകട മേഖലകളിൽ അറിയിപ്പ് നൽകി എംസി റോഡിൽ നാറ്റ്പാക് ജീവന്റെ മുന്നറിയിപ്പ്!

എന്നാൽ • എംസി റോഡിൽ അപകട മേഖലകളിൽ ആധുനിക സഹിയാനയുപയോഗിച്ച് മുന്നറിയിപ്പ് നൽകി അതിത വേഗത്തിന് തടയ്ക്കാനുള്ള ശ്രമത്തിലാണ് ഉപരിതല ഗതാഗത ഗവേഷണ ഏജൻസിയായ നാറ്റ്പാക്. ഇതിനായി വളവുകളിൽ റിയൽ ടൈം സ്പീഡ് ഫീഡ്ബാക്ക് സെൻസ് എന്ന ജർമൻ നിർമ്മിത വേഗ മുന്നറിയിപ്പ് സൂചകം സ്ഥാപിച്ച് പരീക്ഷണം തുടങ്ങി.

വിവിധയിടങ്ങളിൽ വളവുകളിൽ പാലിക്കേണ്ട പരാമ്പരയി വേഗപരിധി രേഖപ്പെടുത്തിയിരിക്കുന്ന നിലവിലെ സൂചകങ്ങൾ അവഗണിച്ച് യാത്ര തുടരുന്നതാണ് പാറങ്ങൾ സ്വീകരിച്ചിരുന്നത്. പുതിയ സഹിയാനത്തിൽ വാഹനം ഓടിക്കുന്നവർക്ക് അക്കല നിന്ന് അനുവദനീയമായ വേഗപരിധിയിലാണോ വാഹനം ഓടിക്കുന്നതെന്ന് അറിയാൻ കഴിയും. റോഡരികിൽ താൽക്കാലികമായോ സ്ഥിരമായോ സ്ഥാപിക്കാവുന്ന ഉപകരണത്തിൽ വേഗപരിധി ഡിജിറ്റലായി തെളിയും. ഇതു ശ്രദ്ധയിൽപ്പെട്ടാൽ വേഗം കുറയ്ക്കാം. മുന്നറിയിപ്പ് ലഭിച്ചിട്ട് യാത്ര തുടരുന്നവർക്ക് അടുത്ത എക്സെക്യൂട്ടീവ് ക്യാമറയിലോ മറ്റു സഹിയാനം ചുമക്കേണ്ടതോ പിടി വീഴും. മുന്നറിയിപ്പ് നൽകാതെ വേഗമുയർത്തിയ എക്സെക്യൂട്ടീവ് ക്യാമറയുമായി ബന്ധപ്പെട്ട പരാതികളെത്തുടർന്നാണ് മുന്നറിയിപ്പും ബോധവൽക്കരണവും നൽകിയുള്ള പുതിയ



എംസി റോഡിലെ അപകട മേഖലയായ എന്നാൽ എ.ജി ജംഷന്തൂ സമീപം നാറ്റ്പാക്കിന്റെ നേതൃത്വത്തിൽ റിയൽ ടൈം സ്പീഡ് ഫീഡ്ബാക്ക് സെൻസ് എന്ന വേഗ മുന്നറിയിപ്പ് സൂചകം സ്ഥാപിച്ച് അപകടം ഒഴിവാക്കാനുള്ള പരീക്ഷണം.

പരീക്ഷണം. ദിവസവും 14 മണി ക്ലറിനുള്ളിൽ 12,000 മുതൽ 16,000 എണ്ണം വാഹനങ്ങളാണ് എംസി റോഡിലൂടെ കടന്നുപോകുന്നത്. നിലവിൽ വളവുകളിൽ റോഡിന്റെ രൂപകൽപന 50 കിലോമീറ്റർ വേഗത്തിൽ പോകുന്നതിനാണ്. എന്നാൽ, 80 കിലോമീറ്ററിന് മുകളിൽ വാഹനങ്ങൾ പാതുരുന്നതു കാരണം അപകടങ്ങൾ പതിവാകുന്നു. വളവുകളിലൂടെ അനവസരത്തിൽ അതിത വേഗത്തിൽ മറികടന്നു പോകുന്ന കാരണം വാഹനം നിയന്ത്രണവിധി അപകടം പതിവാണ്.



എംസി റോഡിൽ വിവിധയിടങ്ങളിൽ കഴിഞ്ഞ 7 മാസമായി റിയൽ ടൈം സ്പീഡ് ഫീഡ്ബാക്ക് സെൻസ് എന്ന വേഗ മുന്നറിയിപ്പ് സൂചകം സ്ഥാപിച്ച് പരീക്ഷണം തുടരുന്നു. ഫലപ്രദമെന്നു കണ്ടാൽ അതിവ അപകട മേഖലകളിൽ സ്ഥാപിക്കുകയാണ് ലക്ഷ്യം. പ്ലേ ബോയറൽ കരണത്തിലൂടെ വാഹനം ഓടിക്കുന്നവരുടെ അതിത വേഗം എന്ന പൊതു സങ്കേതത്തിനു മാറ്റം വരുത്താനും നാറ്റ്പാക് ശ്രമം തുടരുന്നു.

ബി.സുബിൻ

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