



IRF WORLD ROAD MEETING 2017

/ 14-17 NOVEMBER / DELHI / INDIA /

ECONOMIC GROWTH
 ROAD ASSETS
CROSS / ROADS
 INNOVATIVE INFRASTRUCTURE
 SMART MOBILITY
 GREEN INSTITUTIONS
 CITY PLANNING
 INTELLIGENT TRANSPORT SYSTEMS
 RESOURCE COORDINATION
 LINKING MOBILITY SOLUTIONS
 CONNECTED WORLDS
 AUTONOMOUS DRIVING
 DATA-DRIVEN

18th Crossroads World Road Meeting 2017 14 - 17 November 2017 Venue : India Expo Mart Ltd., Greater Noida

CONFERENCE PROGRAMME

14th November 2017	
0830 – 0930 hrs	Registration
0930 – 1100 hrs	Inaugural Session
	<ul style="list-style-type: none"> • Welcoming the Dignitaries • Lighting of Lamp • Saraswati Vandana • Welcome Address by IRF Conference Chair - K. K. Kapila • Address by Secretary, MoRTH - Yudhvir Singh Malik
	<ul style="list-style-type: none"> • Address by the Hon'ble Minister of State - Road Transport & Highways of India - Mansukh L. Mandaviya • Inaugural Address by the Hon'ble Minister of Road Transport & Highways of India - Nitin Gadkari • Road Safety Awards Presentation • Souvenir launch • Vote of Thanks • National Anthem
1100 – 1145 hrs	Inauguration of Exhibition and Networking Tea Break
1145 – 1330 hrs	Plenary Session I – Safe Roads and Smart Mobility
	Speakers
	<ul style="list-style-type: none"> • Gurudev Mr. Ravi Shankar ji, Founder, AOL • R.C. Bhargava, Chairman, Maruti Suzuki • Marc Garneau, Canada Federal Minister of Transport
	<ul style="list-style-type: none"> • Jean Todt, FIA President, UN Secretary General's Special Envoy for Road Safety • Amitabh Kant, CEO, Niti Aayog • Anne Berner, Minister of Transport, Finland
1330 – 1430 hrs	Lunch

1430 – 1600 hrs	Parallel Sessions I	
	Safe Roads for Economic Growth	Mobility Challenge
	629: Research on Road Network Function of Poverty Area in China (Donglan Su/ Jing Wang/ Zhongyin Guo) (Zhongyin Guo)	690: Adjusting procedure for determining the Travel Speed through the HCM 2010 Methodology for Brazilian Urban Roads (Paulo Cesar marques da Silva and Andres Felipe Idrobo Samboni)
	658: Roads for Economic Growth, an Approach in Bangladesh (Suleiman G Purokayo) (Eng. Md. Abdul Quader)	836: Identification of critical locations for Incident Modelling – a Case Study of Kolkata City (Bhargab Maitra and Kaniska Ghosh)
	828: Upgrading of South Africas National Route 3 Economic Corridor Between Durban and Johannesburg, South Africa (Ravi)	855: Investigation of Capacity and Cause of Congestion at Rotary Intersection – a Case Study of Kulula-Pushta Square Kabul, Afghanistan (Ankit Bansal, Rishi Singh Chhabra and Mohammad Noor)
	626: Advanced Inter-Border Information and Communication Transport Management System for Africa Development Integration: A Proposal. (Abiodun Musa Albinu)	888: Characterising Platoon Dispersion Model along Urban Arterials under Heterogeneous Traffic (Praveen P. S. and Ashalatha R.)
	Managing Road Assets	Safer Roads
	631: Cost- benefit Analysis of Highway Maintenance in Thailand (Ponlathep Lertworawanich)	733: The Road Transport Management System: A Self Regulatory Approach for Improving Heavy Vehicle Safety (Oliver Naidoo) (Paul Nordengen)
	694: Cost-Effective provision of low-volume roads in South Africa (Don Ross) (Matthew Townshed)	740: Prioritization of issues related to Indian Road Accidents using MoRTH and NATRIP Database (Chinmoy Pal/ Takahashi Nobuhiko/ Narahari Sangolia/ Tajima Azumi) (Manoharan Jeyabharath)
	864: Asset Management Framework for Road Sector in India (Renu Aneja/ D P Gupta) (Ashok Kumar)	641: Evaluating Truck Drivers speed and seat belt use before and after the implementation of a non-video onboard monitoring system. (Andrew Krum/ Darell Bownman/ Susan Socolich)
	878: Maintenance strategy and budgeting for Road network in Karnataka State using HDM-4 (B. Ravi)	668: Study on Seat Belt usage: Case study of Abu Dhabi Emirate, UAE (Mohammad Shawky/ Ahmed Al-Zaidy) (Mohammad Kishta)
	Special Session : ITS in India	Special Session : iRAP
1600 – 1630 hrs	Networking Tea Break	

1630 – 1800 hrs	Parallel Sessions II	
	Mobility Challenges	Managing Road Assets
	744: The need for improving Urban Mobility for all in Sustainable manner through Intregrated Transport System (B. C. Datta)	648: An Approach towards Automated Estimation of Pavement Condition Index for PMGSY Roads using Pavement Videos (Lalit Kumar Das/ Namita Akoijam) (Huldrom Lokeshwor Singh)
	791: Ahmadabad-Dholera MRTS – a Challenge in Metro Planning (Piyush Kansal/ Amit Singh Baghel/ Priyanka Kataria) (Sujata Savant)	725: Arrangement of Pavement Maintenance activities using Gas (Chao Yang)
	815: Predicting Pedestrian trips to Urban Commercial Land uses (Dipanjan Nag/ Saddam Hussain) (Arkopal K. Goswami)	729: Using high-tech solutions and remote sensing to increase knowledge on the extent and condition of rural road network
	657: Mobility Challenges and Border Routes : The Rise of Regional Conflicts in the Lake Chad Basin (Suleiman G. Purokayo)	
	Innovative Road Infrastructure	Safer Roads
	838: Close Graded Cold Mix for Construction and Maintenance of Rural Roads (P.K. Jain) (Rajeev Aggarwal)	834: Road Traffic Crash Database for India: Way Forward (Soumya K Ghosh/ Shivam Gupta/ Md. Mazharul Haque/ Mark King) (Sudeshna Mitra)
	656: Influence of compactive effort on Sulfur Modified Sand-Bituminous Paving Mixes (Subhashree Jena) (Mahabir Panda)	640: Comparing Accident pattern and characteristics on national Highways in India (Hasan Mehdi Naqvi)
	748: Performance Evaluation of Nano-Caco3 modified bitumen in hot mix Asphalt (Ali Topal) (Hameedullah Raufi)	644: Road accidents in Urban and Rural Area: A Case study of Motorcycle Accidents in Dar es Salaam, Tanzania (Bruno Kinyaga)
	775: Evaluation the properties of VG 10 Bitumen modified with Waste Thermocol (Yogesh Shah/ Sangeeta/ Shanta Kumar) (Supriya Mahida)	773: Accident Analysis on NH-65 (Sachin Das) (Sunny Tawar)
	Special Session: Mobility as a Service	Special Session: Argentina PPP Projects
1830 – 2000 hrs	Welcome Cocktails	

15th November 2017

0830 – 0930 hrs	Registration	
0930 – 1130 hrs	Plenary Session II – Transforming Transportation and Mobility	
	Speakers	
	<ul style="list-style-type: none"> • Erik Grab – Michelin Vice President Strategic Anticipation & Innovation Corporate Development – Keynote Panel • Chris Heathcote – CEO - G20 Infrastructure Hub 	<ul style="list-style-type: none"> • Umberto de Pretto – Secretary General – IRU • S. Hietanen, CEO, Maas Global • Prof. Moshe Ben Akiva, MIT, USA • Neil Pedersen, Executive Director, TRB, USA
1130 – 1200 hrs	Networking Tea Break	
1200 – 1330 hrs	Parallel Sessions - III	
	Mobility Challenge	Innovative Road Infrastructure
	751: Benchmarking accessibility for urban mobility systems (Gaurav Raheja) (Lakshya Pandit)	795: Effect of Liquid Polymer on Performance of Polymer Modified Bitumen and its Mixes (Krushna Chandra Sethi and Sangita)
	802: Mobility for all: The Right Perspective (Anjee Agarwal) (Anjee Agarwal)	847: Effect of Warm Mix Additive on the Performance of Crumb Rubber Modified Asphalt: A Case Study
	853: Accessibility Network Development for TOD along proposed BRT Corridor in Dhaka (P.K. Sikdar) (Swarup Mukherjee)	835: Tailor Made Cold Mix (P. K. Jain and Rajeev Agarwal)
	866: Mobility Constraints of Children in Bangladesh: A Study on Travel to School in Dhaka City (Noor Ali Saha) (M. Shafiq-Ur Rahman)	745: Comparison of Effective CBR Value between Japanese Formula and Elastic Two Layer Theories (Swapan K. Bagui)
	Institutional Framework & Capacity Development	Safer Roads
	770: Skill Development in the Road Sector: A Strategic Framework for India (D P Gupta/ Rashi Grover) (Ashok Kumar)	779: Intersection Sight Distance Analysis Using GIS-for Road Safety (Umadevi G. and Vinoth Kumar L.)
	825: Skills and Competence Development of Future Transportation Professional at the all Levels (Thierry Goger)	686: Identifying the Relationship Between Severe Crash Frequency and the Characteristics of Old Industrial Complexes (Do-Gyeong Kim and Yuhwa Lee)
	639: The Academy of Moroccan National Company for Highways: An innovative corporate uAniversity concept (Abdelkrim Derradji)	792: Road Safety Issued of Hill Roads in India - Experience of RSA (T. S. Reddy)
	832: How Road Transport Regulations Affect road Transport Services (Yucheng Zheng)	634: Traffic Calming Techniques Applied for Achieving Safe Roads in Akyaka Town (Alp Geyik and Cumhuri Aydin)
	Young Professionals Lab	Special Session: TRB

1330 - 1430 hrs	Lunch	
1430 - 1600 hrs	Parallel Sessions - IV	
	Mobility Challenges	Safer Roads
	827: Sustainable Public Transit System for last mile connectivity to major work centres and the mode choice of employees (Ashish Kini B/ B G Sreedevi / Shaheem S) (Salini P N)	680: Comparison of Road Traffic Crash Scenario in Mega, Medium and Small Sized Indian Cities (Geetam Tiwari, Manoj Malayath and Kirat Kaur Dhanoa)
	762: Impact of Helmet Advocacy and Enforcement in Rajatshan (Atiq Ahmed) (Prerna Singh)	844: Determination of Crash Barrier Run-out Lengths for Expressway in India Based on Crash Data Analysis (Ravishankar Rajaraman, Muddassar Patel and Vernon Chinnadurai)
	736: Simulating and analysing chaos of Indian Traffic Condition (Kavita Vemuri) (Mayank Agrawal)	920: Need of Conspicuity on Smaller Vehicles – Bicycles and Motorcycles (Ashish Agarwal, Atul Shukla, Kim L. Tan and Harish Banwari)
	754: Urban network congestion and road safety issues in Delhi: A root cause analysis (P.K. Sikdar) (Dibyendu Sengupta)	744: The Need for Improving Urban Mobility for All in Sustainable Manner through Integrated Transport System (B. C. Datta)
	Innovative Road Infrastructure	Sustainable and Green Transport Infrastructure
	778: Strength Characteristics of Soil Treated with Nano Zinc Oxide for Pavement Applications (J. N. Mandal and Prasanna Kulkarni)	819: Smart, Safe and Green Travel- The Essence of best practice in Developed and Developing Countries (Analysis based on case studies) (Angshukana Datta)
	854: Application of Foam Bitumen in Asphalt Pavement Recycling: A Case Study (Manoj Shukla)	767: Potential Use of Foamed Bituminous Mixes with respect to Energy Consumption and Emissions (Devesh Tiwari/ Aravind Swamy/ Pramod Kumar) (Siksha Swaroop Kar)
	706: Effect of RAP on Characteristics of Flexible Pavements (K. Monu, Surender Singh, Solomon Debbarma and G. D. Ransingchung R. N.)	756: A study on effect of inspection and maintenance on vehicular exhaust emission (Govind Pandey/ Rajeve Kumar Mishra) (Abhinav Pandey)
	769: Use of Fly Ash in Low Volume Road (U. K. Guru Vittal and Shahbaz Khan)	766: Experimental analysis of Direct Carbon Dioxide (CO ₂) Emission from some of the Bitumen Types Normally used in India (P K Nanda/ Vikas Kumar) (Tamosi Bhattacharya)
	Special Session: FIA	Special Session: Drive Safe India
1600 - 1630 hrs	Networking Tea Break	

1630 – 1800 hrs	Parallel Sessions- V	
	Mobility Challenges	Safer Roads
	633: Multilane Highway Capacity Estimation by Micro-Simulation technique using calibrated vehicle following model (Subhamay Gangopadhyay) (Sudip Kumar Roy)	806: Effect on virtual acuity and discomfort from High-beam Glare in Naturalistic Condition on Indian Roads (Kavita Vemuri) (Rohan Bhatial)
	798: Efficient distribution of Fly Ash based on artificial intelligence model: A case of NTPC, Farakka (Kalyani Menon/ Pradeep Kumar Sarkar) (Rohit RP)	673: Drink drivers profile. Analysis of UK Collissions (George Ursachi/ Tanya Fosdick/ Adrian Vasile Horodnic) (Richard Owen)
	724: A study of methods about Roads Network Capacity based on Virtual Vertices Max-Flow (Wei ZHAO)	821: Generating insights from correlating driving behaviour of drivers with the changing driving context (Susmita Pandey) (Birendra Bisht)
	804: Capacity estimation of uncontrolled intersection with and without speed breakers (Mukti Advani/ Ranja Bandyopadhyay/ S. Velumurugan) (Saurabh Kaushik)	783: Identification of factors influencing injury severity of Motorized two-wheeler crashes in Patna (Ajai Kumar Singh) (Sachin Kumar Gupta)

	Innovative Road Infrastructure	Sustainable and Green Transport Infrastructure
	735: Quick Launch Bridges: For Safer, Smoother Traffic on Hill Roads (S. Ravi Shankar)	613: Mainstreaming the use of Green Construction Materials in Rural Roads in India (Arnab Bandyopadhyay)
	777: Behaviour of box culvert with geofoam as a backfill material (Ankita Kumar/ Sunil Kumar Ahirwar) (J.N. Mandal)	741: Use of Marginal Soils in some Spanish road construction, highway A-44, Santa F-Las Gabias (Jose Antonio Moya) (Ignacio Hinojosa Sanchezbarbudo)
	822: Inventing Unique Bridge Abutments in Uttarakhand (M.K. Mittal/ Alok Pandey) (A.K. Dinkar)	823: Replacement of Cursher run aggregate as a value reinforcement material for Reused Waste of Construction Materials (Rutenio Cesar Cristaldo/ Fernando Jorge Correa Maalhes Filho/ Joo Henrique Rodrigues De Abreu/ Uescley Da Costa Barbosa) (Rocheli Carnaval Cavalcanti)
	790: Design and Construction of Rockfall Mitigation measures along Mumbai Pune Expressway: A Case Study (Roshan R.S.V.)	683: Bio-Engineering for Sustainable Road Maintenance (Indu Dhakal)

	Special Session: Future of Mobility	Special Session: Global Alliance of Road Safety NGOs

1830 – 2200 hrs	Colors of India Night
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16th November 2017

0830 – 0930 hrs	Registration
0930 – 1130 hrs	Plenary Session III – Road Safety: Realising Vision Zero
	Speakers
	<ul style="list-style-type: none"> • M. Sokolov, Russian Minister of Transport • Rob Mc Inerney, CEO, IRAP • W.U. Dejin, Director General, China Ministry of Transport • John Riccardi, Vice President Transportation Safety, 3M • José Luis Irigoyen, Sr. Director, World Bank • Jeff Michael, Administrator, NHTSA, USA

1130 – 1200 hrs	Networking Tea Break
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1200 – 1330 hrs	Parallel Sessions- VI	
	Managing Road Assets	Innovative Road Infrastructure
	691: Management of the Risk of Flooding and Water Erosion on Motorways in Morocco (Kerstin Hartch, Nabil Mequedad and Abdelkrim Derradji)	650: Effect of conditioning time and temperature on the volumetrics and stability of Dry Process Crumb Rubber Modified Warm Asphalt Mixtures (Farshad Kamran)
	738: Development of Pavement Maintenance Management System for High Speed Road Corridors Using State-of-Art Technologies (Pradeep Kumar)	680: Comparison of Road Traffic Crash Scenario in Mega, Medium and Small Sized Indian Cities (Geetam Tiwari/ Manoj Malayath) (Kirat Kaur Dhanoa)
	857: Result and Applications of Deterioration Model in Road Asset Management, A Case Study, Ethiopia (Rajeev Kumar Makhija)	660: High performance Asphalt material for sustainable pavement
	782: Basic of Pavement Preservation in a Changing World	688: Behavioural study of self-compacting concrete with Wollastonite Microfiber as part replacement of sand for PQC (Praveen Kumar) (G.D. Ransinchung R.N.)

	Safer Roads	Sustainable and Green Transport Infrastructure
	670: Vulnerable road users in South Africa: using the theory of planned behaviour to influence the road safety education curriculum (Helena Fourie/ Gerda van Dijk/ Lianna Malan) (Helena Fourie)	800: Road Networks as Ecological Corridors: A Case for Sustainable Road Landscapes in India (Nidhi Madan)
	809: Frame working Road Safety by Safe System approach on SHs and NHs in India and Assessment with iRAP (V S Landge) (Nikhil Krishnan)	788: Moroccan Highways Roadmap for Sustainable Mobility (Hynd Bouhia, Nabil Mequedade and Abdelkrim Derradji)
	638: Road Safety improvement of Goa Medical College area on NH 17 in India: A case study (Ravi Prasad V V S S Palakodeti)	675: ITS for Integrated Management of Highway Storm Water Run-off: The Treatment of Chronic Effects and the Protection from Acute Effects on the Environment Caused by Liquid Spills (Sabato Fusco and Stefano Biondi)
	765: Moving towards Safer Speed: A new direction in speed management in Queensland, Australia (Andrew Pine/ Sam Atabak/ Simon Harrison/ Partha Parajuli) (Peta Peterson)	826: Feasibility Study for Restoration of Campo Grande-MS Pavement through Polymer-modified Cold Asphalt Microrrestment (Rutenio Cesar Cristaldo, Priscila Sabioni, Ana Paula Ferreira, Janaina Da Silva and Rocheli Carnaval Cavalcanti)

	Special Session: IRU	Special Session: WORLD BANK

1330 – 1430 hrs	Lunch
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1430 – 1600 hrs	Parallel Sessions-VII	
	Managing Road Assets	Innovative Road Infrastructure
	764: A Solution for Strategic Asset Management System in Germany (Andreas Grossman)	679: Design of Long Life Pavements based on thin high strength cement bound bases. M7/M8 Portlaoise Motorway experience (Ireland) (Gianni Rovito) (David Almazan)
	785: Asset Management of Low Volume Rural Roads	730: Research on the construction thoughts and counter measures of tourism scenic byway in China (Yangxing)
	842: French National Road Observatory (Christine Leroy and Jean Claude Roffe)	742: New Generation Pavement Design with Nanotechnology
	881: A Framework for Asset Management for PMGSY Road Network (P K Sikdar and Pramod K. Nanda)	759: Advancement in concrete paving technology in India (B.S. Singla) (R K Jain)

	Safer Roads	Sustainable and Green Transport Infrastructure
	889: Safety Modelling of Urban Roads – a Case Study of Tiruchirapalli City (Kavitha K/ Moses Santhakumar) (Hemanthini A.R.)	635: Enhancement of unconfined compressive strength (UCS) values of Reclaimed Asphalt Pavement (RAP) for using it as sub-base/ base course of flexible pavement. (Prof. JN Mandal) (Dulal Chandra Saha)
	885: Crash Frequency Prediction models and Development of Crash Modification Factors for Four Lane Highways in India (Naveen Kumar Chikkakrishna/ Manoranjan Parida/ Sunil Kumar Verma) (Sukhvir Singh Jain)	757: Mechanical Properties of Binary Blended Concrete Mixes for rigid pavement (Dinesh Ganvir)
	882: How to use Artificial Intelligence & Data to Improve Safety on Motorways (Yassine Alouini/Rmi Delassus) (Marie Quinquis)	852: Characterization of Silicon-Manganese Iron Slag for 1 employment in Base and Sub-Base Layers for Highway (Ben-Hur Albuquerque e Silva) (Filipe Batista Ribeiro)
	710: A Proactive Approach to Assess Safety Level of At Grade Signalised Intersections (Prerit Gupta/ Munavar Fairouz Charanchery) (Bhargab Maitra)	824: Study of Re-composition of Asphalt Paving for Sanitation Works (Fernando Jorge Correa Magalhes Filho/ Priscila Sabioni/ Talita Franchiscini/ Renata Rodrigues) (Rocheli Carnaval Cavalcanti)

	Special Session: Fast Tracking Road Safety by Corporates	Special Session: FEHRL

1600 – 1630 hrs	Networking Tea Break
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1630 – 1800 hrs	Parallel Sessions-VIII	
	Safer Roads	Intelligent Transport System
	671: Distraction in road-safety interventions. Challenging social norms without using ‘fear appeal’ (Tanya Dossdick/ Dan Campsali/ George) (Steve Ferris)	607: Advanced Integrated Incident Management System for National Highways in India (R.K. Pandey) (H.M. Naqvi)
	645: Road Safety Culture in Indian Context in all the facets of Highway Development need of the hour (Ravi Prasad V V S S Palakodeti)	687: Role of Intelligent Transportation System in Road Safety: A Case Study of Delhi (Sukhvir Singh Jain) (Sourabh Jain)
	787: Education and Awareness (Mridul Bhasin)	684: Application of Intelligent Transport System (ITS) for Developing Countries (Sanjeev Suman/ Shmabhavi Mishra) (Praveen Kumar)
	651: Effectiveness management of technology, regulation, and community in Road Traffic Accident Reduction Projects (Mohammad Al Haj/ Maaz Khan) (Mohammad Al Sallout)	830: Infrastructure to facilitate Automated and Assisted Driving (Thomas Hedblom/ Kris Hansen/ Jane Peterson)
	Innovative Road Infrastructure	Special Session: Highway Capacity
	739: Self-Healing Pavements: A Revolution in Pavement Materials (Devesh Tiwari, Sunil Jain, Pradeep Kumar)	Special Session: BELT and Road Initiative
	N4: Innovative and Cost Effective Method of Road Embankment Foundation Design Using Basal Reinforcement Technique for DUQM Road Project in Oman (Maccaferri)	Young Professionals Lab
	793: Design of Geogrid Reinforcement and Drainage Composite for Flexible Pavement: Present Challenges in Practical Applications (Padmaja Gurram and Anusha Nandavaram)	
	N2: Safer Roads – A Way Towards Economic Growth: A Case Study on Landslide Mitigation Measures Along MH-58 in Uttarakhand, India (A. Veeragavan)	
1830 – 2200 hrs	Gala Dinner	

17th November 2017

0830 – 0930 hrs	Registration	
0930 – 1130 hrs	Plenary Session IV – Chief Ministers' Forum	
1130 – 1200 hrs	Networking Tea Break	
1200 – 1330 hrs	Parallel Sessions - IX	
	Innovative Road Infrastructure	Safer Roads
	796: Extraction of Ground Surface Along Roadway from Mobile LiDAR Data (Bharat Lohani and Ajai Kumar Singh)	743: The positive impact of speed enforcement on traffic safety- Case Studies- final version (Nadine Rbenacker)
	737: Technological Advances Leading to Sustainable Construction of Infrastructure (Vinay Gupta)	760: Evaluation of Post-Incident Traffic Management Measures for emergency responses: A case study of Kolkata City (Roshni Khandelwal/ Meenu Francis/ Bhargab Maitra) (Kaniska Ghosh)
	890: FOX and USE-IT: Harmonised and Interoperable Transport Infrastructure Across All Transport Modes (Caroline Evans, Migle Pallukaite and Theirry Goger)	732: Training the U.S. Roadway Maintenance Operations Workforce in responding to traffic incidents and all hazard emergencies and disasters (Dave Bergner)
	763: New Methods to Measure and Evaluate the Roads in 3D Based LiDAR (Dirk Ebersbach)	758: Identification and Ranking of dangerous violation Types: Abu Dhabi Case Study (Abdulla Al Gafli/ Mohammed El- Esawey) (Mohamed Shawky Ahmed)
	Managing Road Assets	Mobility Challenge
	649: Bridge Management System in Portugal: the Past, the Present and the Future (Vtor Brito, and Tiago Mendona)	920: Need of Conspicuity on Smaller Vehicles – Bicycles and Motorcycles (Ashish Agarwal, Atul Shukla, Kim L. Tan and Harish Banwari)
	674: Maintenance Strategy of Coating System for Bridges Located in Severe Corrosive Environment (Shigeki Kusuhara, Masao Kume, Akira Machida and Kazunori Nobushige)	797: Temporal Classifications of Flow- Patterns in Mid-sized Urban Road Network (Dabasis Basu and Bhargab Maitra)
	850: Rehabilitation of National Highway Damaged by Rain using Geo-synthetics in Hilly Terrain: A Case Study (Gautam N Dalmia, Shahrokh P. Bagli, Ajoy C. Bordoloi)	624: Stopped Delay to Control Delay Conversion Factor for Non-lane Based Heterogeneous Traffic at Signalized Intersection (Darshana Othayoth and K.V. Krishna Rao)
	N1: Geo-synthetic Application Pavement - Advance Solutions for Sustainable Environment (S. K. Nirmal)	856: Highway Capacity Standard in India – A Political Agenda (Vijaya Prasad and P. K. Sikdar)
	Young Professionals Lab	Special Session: PIARC
1330 – 1430 hrs	Lunch	

1430 – 1600 hrs	Parallel Sessions - X	
	Safer Roads	Managing Road Assets
	614: A New Model to Identify High-Risk Corridors for Safety Measures within Iranian Roads Network (J. Hedayati)	780: Performance Evaluation of National Road Construction Management in Indonesia (Tisara Sita and Agus Taufik Mulyono)
	749: Qualitative Methodology for Road Safety Risk Rating and Ranking (Carlos A. Moncada Aristizabal and Alejandro Londono)	845: Tyre Bursting on Expressways of Rigid Pavement - A Way Forward (Satendar Kumar)
	774: Safety Rating and Management of Road Network Based on Safety Inspection (Gluseppina Pappalardon and Salvatore Cafiso)	731: Research on China Green Highway Construction - Thoughts And Construction Mode (Yang Xing)
	858: Rating and Prioritization of Accident Blackspots and Road Safety Measures: Case Study of National Highway 44 (Azadpur Border Delhi NCT) (Pradeep Kumar, Jigesh Bhavsar and Shawon Aziz)	N3: DEM Simulation of Punch Test for Mechanical Characterisation of Critical Mesh (Maccaferri)
	Safer Roads	Intelligent Transport System
	917: Implementation of Africa Road Safety Action Plan (Jane Karonga)	753: Real Time Adaptive Traffic Signal Control for Multiple Intersections in Heterogeneous Traffic Conditions (S. Moses Santhakumar and Chilveri Srinath)
	918: Novel School Zone Safety for Vulnerable Road Users (Semi Kwak, Hyosub Ahn, Kwangsoo Kim, Woo-seob Kim and Taehyun Ryu)	772: European Opticities, Grand Lyon, France: A Real- Time Simulation Model for Urban Traffic Control and Network Optimisation (Alexandre Torday and Dave Keenan)
	919: Road Safety Education and Awareness Program: A Massive Rural Outreach Initiative (C. L. Verma, S. K. Singhvi, Guneet Singh Assi, Rajeev Kumar Agarwal)	811: ITS Using Fuzzy Logic for Real-Time Demand - Responsive Transport System (Vinay Maitri and Rohit R. P.)
	727: Study on Conditions of Children Transport on Motorcycle in Latin America	833: Virtual ITS and Big Data: New Possibilities for Road Operations and Traffic Management (Ana Maria de la Parra and Alfonso de la Parra)
1600 – 1630 hrs	Networking Tea Break	
1630 – 1800 hrs	CLOSING CEREMONY	