## CONFERENCE PROGRAMME AND BOOK OF ABSTRACTS



## 2ND INTERNATIONAL CONFERENCE ON TRANSPORTATION IN AFRICA

Majestic Five Hotel, Palapye, Botswana 25th - 27th November 2015

"Enhancing Safe and Sustainable Transport Infrastructure in Developing Countries"

















Organisers: African Transportation Professional Networking Group in collaboration with Transport Stakeholders, Universities and Professionals.

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## Majestic Five Hotel, Palapye, Botswana 25th – 27th November 2015

"Enhancing Safe and Sustainable Transport Infrastructure in Developing Countries"
Tuesday, November 24, 2014

14:00-18:00 Pre-Registration of Participants at Majestic Five Hotel, Palapye, Botswana Day 1: Wednesday, November 25, 2015

07:00-08:00 Registration of Conference Participants

Time	Description	Speaker/Title	Organisation & Country
08:00-8:05	Opening Session: Chaired by Opening Prayer & National Anthem	<b>Mrs G. Morekisi</b> Permanent Secretary	Ministry of Transport & Communications, <b>Botswana</b>
08:05-8:15	Introductory Remarks	<b>Prof. J. Katende</b> Dean, College of Eng.&Tech.	Botswana Int'l University of Science & Technology (BIUST), Botswana
08:15-08:30	Welcome Remarks	<b>Prof. J. Cooke</b> Ag. Vice Chancellor	BIUST, Botswana
08:30-09:00	Official Opening	Hon. Tshenolo A. Mabeo, MP Minister	Ministry of Transport & Communications, <b>Botswana</b>
09:00-09:15	Brief Overview of African Community Access Programme (AFCAP)	Nkululeko Leta Regional Technical Manager	AFCAP, UK
09:15-09:45	Keynote Presentation: Safe and Sustainable Transport Infrastructure in Africa-A New Approach	Prof. P. Paige-Green Extraordinary Professor	Tshwane University of Technology, South Africa
09:45-10:00	Presentation of Gifts, Vote of Thanks and Group Photo	<b>Dr. A. S. Oladele</b> Chair ICTA2015	BIUST, Botswana
10:00-10:30	Tea	Break	
10:30-12:45	Room A: Road Transport & Sustainability Issues Chair: Mrs. K. Kalasi, Ag. Director, Roads Department, Botswana	Room B: Sustainable Rail an Chair: Mr. J. Ramontsho, Bots Botswana	
(20 minutes for each presentation, followed by 10minutes discussion and 15minutes	Practical Steps in Transforming the North South Corridor from Transport Corridor to an Economic Corridor - B. Mdlankomo (Cross-Border Road Transport Agency, South Africa)	Critical success factors for a l the African continent - M. M. Africa)	
	Sustainable Product Service Systems in the transportation industry: The case of urban areas in Botswana – Y. Rapitsenyane (University of Botswana, Botswana)	The Effects of ICT on Sustainability and Safety of the Railways in a Developing Country – L. T. Gaolemoge (Botswana Railways, Mahalapye, Botswana)	
for combined resolutions)	Sustainable Transport Infrastructure in a Changing Climate - J. Ngoma (Meteorological Services		
	Department, Zimbabwe)  Development of Sustainability Plan for Namibia Road Transportation – A Model for Developing Countries – P. Hekandjo(Roads Authority, Namibia)	The Reliability of Air Transpo S. Iketleng (University of Bots) (Botswana International Univer Technology, Botswana)	wana) and A. S. Oladele
12:45-13:45	Lunch Break		

13:45-15:30	Room A: Low Volume Roads & Rural Accessibility Chair: Mr. L. Nkululeko, Regional Technical Manager, AFCAP, UK	Room B: Safe Mobility & Traffic Safety Issues Chair: Mr. B. Modukanele, Ag. Director, Department of Road Transport & Safety, Botswana		
	Are we doing unnecessary or incorrect material testing for low volume roads? - P. Paige-Green (Tshwane University of Technology, South Africa)	Innovation and Technology to address the Road Safety challenges in Africa – J. Coetzee (ITS Engineers, South Africa)		
	An Alternative Approach to the Design of Low Volume Roads Based on the Dynamic Cone Penetrometer - M.I. Pinard (Infra Africa Pty (Ltd), Botswana)	Trend Analysis of Road Traffic Fatalities in Malawi – G. M. Ngwira (Road Traffic Directorate, Malawi); B. Bolaane and B. P. Parida (University of Botswana)		
	Learning with Older People about their Transport and Mobility Problems in Rural Tanzania - G. Mulongo (Tanzania)	Accident Alert and Autodial System - T. E. Mashayahanya (Chinhoyi University of Technology, Zimbabwe)		
15:30-16:00	Tea Break			
16:00-17:30	Room A: Analysis, Design & Construction Chair: Dr. M. W. Letshwenyo, Ag. HOD, Civil & Environmental Engineering, BIUST, Botswana Redesign of the Decommissioned Dande (Mbire) River Bridge in Zimbabwe - T. R. Munengwa, S. Shumba and A.S. Salahuddin (University of Zimbabwe, Zimbabwe)  Delay Study of Road Construction Project in Botswana B. T. Motlakasi and A. Y. Adeyemi (University of Botswana, Botswana)  Road Drainage Systems in Palapye: Suggestions for Adaptation to Storm Water Runoff and Floods - T. M. Bafitlhile and A. S. Oladele (Botswana International University of Science & Technology, Botswana)	Room B: Application of GIS in Transportation Chair: Prof. Felicia Akinyemi, Department of Earth & Environmental Science, BIUST, Botswana Transport Modelling in GIS – E. Tembo and B. Nkwae, (University of Botswana, Botswana)  Design of a Public Transport Web Mapping Service (WMS) for the city of Gaborone – L. Maphale, L. K. Sereetsi, K. Moreri, M. B. Manisa (University of Botswana, Botswana)  Suitability of GPS Derived Heights for Civil Engineering Projects (Roads) – M. Manisa, L. Maphale, M. Segobye and K. Ntsosa, (University of Botswana, Botswana)		
19:00-21:00	Welcome Cocktail			

Time			
	Day 2: Thursday, November 26, 2015		
08:00-10:00	Room A: Pavement Materials & Procurement Chair: Mrs. L. Mothudi, Chief Technician, Civil & Environmental Engineering, BIUST, Botswana	Room B: Transport & Traffic Management Chair: Mrs. M. Mabua, Transit Specialist, USAID Southern Africa Trade Hub, Botswana	
(20 minutes for each presentation	Stabilization of Expansive Clay Soil with Sugar Cane Molasses and Cement – A. A. Araya, B. Taye (Alert Consult Engineering Plc, Ethiopia)	Estimation of delay at Pre-timed Signalized Intersections for mixed traffic conditions in Gaborone - B. B. Madzikigwa, University of Botswana, Botswana)	
10 minutes for discussion and resolutions)	A Case Study for the Use of Limestone as a Road Base: Strategy for Testing for Compliance with Specifications – B. Musarurwa, A. Zonde, M. Z. Mashingaidze, M. Caetano (Department of Roads, Zimbabwe)	Design of an Automated Speed Warning System Interfaced with Intelligent Braking System for Road Vehicles Collision Avoidance - D. Simango, R. Muvunzi, H. Musaidzi, P. Mlamb, Zimbabwe)	
	Impacts of Secondary Minerals in aggregates on Road Pavements Performance – N. Bloxsom and J. Egwurube (Central Queensland University, Australia)	Traffic Congestion and Mobility Solutions for Francistown Road Transportation Network Systems - M. Segola and A. S. Oladele (BIUST, Botswana)	
	Sources of Claims on Road Construction Projects in Botswana – O. Segwabe and A. Y. Adeyemi (University of Botswana, Botswana)	Evaluation of the Effectiveness of Palapye Road A1 Intersections to mitigate Traffic Congestion - S. Busang and A. S. Oladele (BIUST, Botswana)	
10:00-10:30	Tea Break		
10:30-12:45	Room A: Pavement Performance & Maintenance Chair: Dr. A.S. Oladele, Dept. of Civil & Environmental Engineering, BIUST, Botswana	Room B: Route Location & Mass Transit Chair: Dr. B. Nkwae, Civil Engineering Department, University of Botswana, Botswana	
(20 minutes for each presentation 10 minutes for discussions and 15minutes for resolutions)	Early Post-Construction Pavement Failures: Lessons Learnt For Enhancing Pavement Sustainability – M. B. Mgangira (CSIR, Pretoria, South Africa)	Exploring the links between access to schools in rural communities: the case of Chikhwawa District, Malawi – W. Kuotcha, I. Ngoma, (University of Malawi, Malawi) and N. Ferguson (University of Strathclyde, Glasgow)	
	Pavement Predictive Equations-a Key Component of Pavement Management Systems – G. Lebitsa (University of Botswana) and K. Mmopa (Roads Department, Botswana)	The Role of Truck Stops in Strengthening the Maputo Transport Corridor Intelligence through Data Generation B. Mdlankomo and E. Chibira (Cross- Border Road Transport Agency, South Africa)	
	Performance Equation for Cement Modified Pavements – A. Matanovic and J. Egwurube (Central Queensland University, Australia)	The Introduction of a Bus Rapid Transit (BRT) System Link Between Harare and Chitungwiza, Zimbabwe — A. Mudzingwa, S. Shumba and L.D. Vassileva (University of Zimbabwe, Zimbabwe)	
	Impact of Road Network on the Regional Trade in Africa – H. Ghoniem & S. Zaghloul (Egypt)	Rural Accessibility and Sustainable Infrastructural Development in the Niger Delta: A Polycentric Planning Perspective - S. R. Akinola and A. I. Odulu (Osun State University, Nigeria)	
12:45-13:45	Lunch Break		
14:00-15:30	Workshop/Panel Discussion Session 1 Facilitated by: Conference Sponsors	Workshop/ Panel Discussion Session 2 Facilitated by: Conference Sponsors	
15:30-16:00	Tea Break		
16:00-17:30	Workshop/Panel Discussion Session 1 Continues	Workshop/Panel Discussion Session 2 Continues	

19:00-22:00 Conference Dinner

Day 3: Friday, November 27, 2015

Time	EXCURSION/FIELD TRIP	EXCURSION/FIELD TRIP
8:30-12:30	Site visit - Group 1:	Excursion – Group 2:
	On Going Dualisation Project Along A1 Road for International delegates on the way back to Sir Seretse Khama International Airport at Gaborone/ Francistown	Khama Rhino Sanctuary in Serowe Central to view white and black rhinos, giraffes, zebras, wildebeests, warthogs, springboks, impalas
	Airport.	
13:00-14:00	Lunch Break & End of Conference	